

Proposal # 2001-1213 (Official Use Only)

**PSP Cover Sheet** (Attach to the front of each proposal)

Proposal Title: American Basin Fish Screen and Habitat Improvement Project  
Applicant Name: Natomas Mutual Water Company  
Contact Name: Peter Hughes, General Manager  
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**Amount of funding requested:** \$950,000

Some entities charge different costs dependent on the source of the funds. If it is different for state or federal funds listed below.

State cost \_\_\_\_\_

Federal cost \_\_\_\_\_

**Cost share partners?** X Yes        No

Identify partners and amount contributed by each U.S. Bureau of Reclamation \$950,000 to be requested.

**Indicate the Topic for which you are applying (check only one box).**

- |  |  |
|--|--|
| <input type="checkbox"/> Natural Flow Regimes                | <input type="checkbox"/> Beyond the Riparian Corridor                |
| <input type="checkbox"/> Nonnative Invasive Species          | <input type="checkbox"/> Local Watershed Stewardship                 |
| <input type="checkbox"/> Channel Dynamics/Sediment Transport | <input type="checkbox"/> Environmental Education                     |
| <input type="checkbox"/> Flood Management                    | <input type="checkbox"/> Special Status Species Surveys and Studies  |
| <input type="checkbox"/> Shallow Water Tidal/Marsh Habitat   | <input type="checkbox"/> Fishery Monitoring, Assessment and Research |
| <input type="checkbox"/> Contaminants                        | <input checked="" type="checkbox"/> Fish Screens                     |

What county or counties is the project located in? Sacramento County and Sutter County

**What CALFED ecozone is the project located in? See attached list and indicate number. Be as specific as possible** 3.5

**Indicate the type of applicant (check only one box):**

- |  |  |
|--|--|
| <input type="checkbox"/> State agency                    | <input type="checkbox"/> Federal agency        |
| <input type="checkbox"/> Public/Non-profit joint venture | <input checked="" type="checkbox"/> Non-profit |
| <input type="checkbox"/> Local government/district       | <input type="checkbox"/> Tribes                |
| <input type="checkbox"/> University                      | <input type="checkbox"/> Private party         |
| <input type="checkbox"/> Other: _____                    |  |

Indicate the primary species which the proposal addresses (check all that apply):

- |  |   |
|--|---|
| <input type="checkbox"/> San Joaquin and East-side Delta tributaries fall-run chinook salmon | <input checked="" type="checkbox"/> Spring-run chinook salmon |
| <input checked="" type="checkbox"/> Winter-run chinook salmon                                | <input checked="" type="checkbox"/> Fall-run chinook salmon   |
| <input checked="" type="checkbox"/> Late-fall run chinook salmon                             | <input type="checkbox"/> Longfin smelt                        |
| <input type="checkbox"/> Delta smelt   | <input checked="" type="checkbox"/> Steelhead trout           |
| <input checked="" type="checkbox"/> Splittail  | <input checked="" type="checkbox"/> Striped bass              |
| <input checked="" type="checkbox"/> Green sturgeon   | <input type="checkbox"/> All chinook species                  |
| <input type="checkbox"/> White sturgeon  | <input type="checkbox"/> All anadromous salmonids             |
| <input checked="" type="checkbox"/> Waterfowl and Shorebirds                                 | <input checked="" type="checkbox"/> American shad             |
| <input checked="" type="checkbox"/> Migratory birds  |   |
| <input type="checkbox"/> Other listed T/E species: _____                                     |   |

Indicate the type of project (check only one box):

- |   |   |
|---|---|
| <input type="checkbox"/> Research/Monitoring                  | <input type="checkbox"/> Watershed Planning |
| <input type="checkbox"/> Pilot/Demo Project                   | <input type="checkbox"/> Education          |
| <input checked="" type="checkbox"/> Full-scale Implementation |   |

Is this a next-phase of an ongoing project? Yes X No \_\_\_\_\_  
Have you received funding from CALFED before? Yes X No \_\_\_\_\_

If yes, list project title and CALFED number American Basin Fish Screen and Habitat Improvement Project, Project No. 98-B29

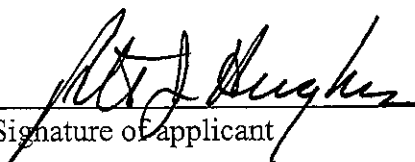
Have you received funding from CVPIA before? Yes X No \_\_\_\_\_

If yes, list CVPIA program providing funding, project title and CVPIA number (if applicable):  
American Basin Fish Screen and Habitat Improvement Project, Cooperative Agreement No. 99-FC-20-0165

By signing below, the applicant declares the following:

- The truthfulness of all representations in their proposal;
- The individual signing the form is entitled to submit the application on behalf of the applicant (if the applicant is an entity or organization); and,
- The person submitting the application has read and understood the conflict of interest and confidentiality discussion in the PSP (Section 2.4) and waives any and all rights to privacy and confidentiality of the proposal on behalf of the applicant, to the extent as provided in the Section.

Peter J. Hughes  
Printed name of applicant

  
Signature of applicant

## **Executive Summary**

### **Project Title and Applicant Name:**

*Title:* American Basin Fish Screen and Habitat Improvement Project  
*Applicant:* Natomas Mutual Water Company (NMWC)

### **Project Description and Primary Biological/Ecological Objectives:**

This proposal requests cost share funding to perform the final design, complete the environmental documents, and to obtain the necessary permits and licenses for the *American Basin Fish Screen and Habitat Improvement Project*. The project involves the removal of a diversion dam, the consolidation of diversions, and the addition of state-of-the-art fish screens to NMWC's diversions on the Sacramento River, between Verona and the American River, and on the Cross Canal. The specific objectives of the project are to remove migration barriers; prevent straying and entrainment of winter-run Chinook salmon, spring-run Chinook salmon, fall-run Chinook salmon, late fall-run Chinook salmon, steelhead trout, splittail, green sturgeon, and other high risk species; and to improve aquatic, riverine, and riparian habitat.

### **Approach/Tasks/Schedule:**

NMWC's intended approach is to complete the design and environmental documentation in consultation with the responsible resource and regulatory agencies, obtain the necessary permits, procure the required right-of-way, obtain bids for construction, perform the relocation work, construct the fish screen facility, and monitor its effectiveness. The design, environmental documentation, and project management will be performed by NMWC with the assistance of consultants.

The project phase for which funding is requested is Phase III – *Final Design & Permitting*. The primary tasks being performed under Phase III are the completion of a final design, completion of environmental documentation and permitting, securing right of-way for construction, and preparation of a competitive bid package for the project. Phase III is currently scheduled for completion by the end of 2001.

### **Justification for Project and Funding by CALFED:**

The elimination of migration barriers and entrainment losses at unscreened diversions, which result in direct mortality to at-risk fishery resources, as well as the lack of critical rearing habitat, have been identified as principal stressors by CALFED and CVPIA, and will be addressed by this project. Biological monitoring has documented that winter-run, spring-run, fall-run, and late fall-run sized juvenile Chinook salmon, steelhead, splittail, and other at-risk resident and migratory fish species are currently entrained at similar unscreened diversions. The restoration project is, therefore, consistent with CALFED ERP strategic goals for the 2001 Implementation Plan and CVPIA priorities.

### **Budget Costs:**

NMWC is seeking a \$950,000 cost share for the final design and permitting phase of the project. The project represents a cooperative effort with significant financial matching support through the CVPIA Anadromous Fish Restoration Program. The balance of funding for this phase of the project will be paid for by the federal government and/or local cost share.

### **Local Support/Coordination with Other Programs:**

NMWC's shareholders, local agencies, and water purveyors have expressed strong support for the project. NMWC has provided funding for the project prior to Phase I funding by the CALFED/CVPIA agreement, and expects to provide future financial support for the project.

The work for this project is being coordinated with the CVPIA Anadromous Fish Restoration Program (AFRP), through consultation with its technical team. Coordination with the AFRP technical team will be continued through the design, construction, and monitoring phases of the project.

# **Proposal for American Basin Fish Screen and Habitat Improvement Project**

## **C. Project Description**

### **1. Statement of the Problem.**

- a. Problem – This Proposal requests cost share funding from CALFED to perform the Final Design and Permitting required for Natomas Mutual Water Company's (NMWC) American Fish Screen and Habitat Improvement Project. The specific goal of the project is to remove a fish negative barrier, improve habitat, and prevent entrainment of winter-run chinook salmon, spring-run chinook salmon, fall-run chinook salmon, late fall-run chinook salmon, splittail, steelhead trout, green sturgeon, and other high risk species.

NMWC is a non-profit mutual water company that controls surface water rights for over 250 landowners within the 55,000 acres known as the American Basin. As part of its irrigation system, NMWC operates five (5) unscreened diversions, with a total capacity of about 630 cfs. In addition, during some dry years, NMWC installs a dam at the mouth of the Natomas Cross Canal and installs diesel lift pumps to draw water from the Sacramento River into the Natomas Cross Canal. The Natomas Cross Canal is a tributary to the Sacramento River, which channelizes flow from a number of creeks to the east (refer to attached Figure 1 and paragraph 2.a., below). A map of NMWC's existing facilities is included as Figure 2, attached.

NMWC began the planning effort for this project in 1993. Initial studies by NMWC looked at operational changes, the use of alternative type barriers, and the relocation or consolidation of diversions. As a result of this initial planning, NMWC has proposed a project to remove a diversion dam and pumps from the Natomas Cross Canal, consolidate their five diversions to one or two facilities located on the Sacramento River, and provide positive barrier fish screens on the consolidated Sacramento River diversion(s).

NMWC has been coordinating the proposed project with local interest groups, resource and regulatory agencies, and funding agencies for over five (5) years. The project has been complicated by proposals from resource and local agencies which could effect the scope of the project. The Department of Water Resources (DWR) is proposing a conjunctive use project for the American Basin, which centered on operational changes in NMWC's service area. The Placer County Water Agency, City of Sacramento, and the American River Basin Cooperating Agencies are studying the relocation of some American River diversions to the Sacramento River, by use of a combined diversion with NMWC. NMWC will coordinate the project with these entities, but intends to move forward with the design of facilities to meet their present needs.

The proposed project will remove a mitigation barrier, remove all diversion facilities from the Cross Canal, consolidate diversion locations, provide positive barrier fish screens, and assist in restoration of aquatic, riverine, and riparian habitat. Entrainment caused by unscreened diversions, blockage of suitable habitat, lack of

quality stream channel and riparian habitats, and excessive predation has been identified as key stressors affecting anadromous fish species in this area. The project attempts to protect anadromous fish species by addressing NMWC's potential impact upon these stressors, and to assure a stable water supply to upland habitat considered critical to other at-risk species such as the giant garter snake and the Swainson's hawk.

- b. Conceptual Model – The proposed project is a full scale implementation project to remove a fish negative barrier, consolidate diversions, and screen diversions.

Removal of the diversion dam will eliminate the isolation of a side channel and tributary to the Sacramento River. In concept, removal of this barrier will partially restore a natural flow regime and enhance access of sensitive fish species to historical spawning habitats and critical rearing habitat.

Consolidation of diversions will restore critical habitat and reduce exposure of sensitive fish species to diversions. Removal of diversions from the Natomas Cross Canal will assist in restoration of natural flow regimes and restoration of riparian and riverine habitat. In concept, this action will reduce potential for entrainment, assist in restoration of critical rearing habitat and reduce potential for straying of migrating anadromous fish species.

Installation of positive barrier screens will result in a substantial reduction of entrainment mortality to winter-run chinook salmon, spring-run chinook salmon, steelhead trout, green sturgeon, splittail, white sturgeon, striped bass, fall-run chinook salmon, and American shad. Based upon DFG and NMFS fish screen criteria, resource agencies have estimated the reduction in entrainment losses of juvenile fish (e.g., juvenile chinook salmon) to be approximately ninety-five percent (95%) when compared with an existing unscreened diversion facility.

- c. Hypotheses Being Tested – This implementation project does not specifically test or compare any hypotheses. The restoration project targets CALFED goals 1, 2, 3, and 4 as provided in the PSP and the CVPIA stressors of Quality of Accessible Stream Channel and Riparian Habitat, Blockage of or Reduced Access to Suitable Habitat, Unscreened or Inadequately Screen Diversions, and Excessive Predation, as listed in Table 3 of PSP, Attachment G.
- d. Adaptive Management – The project proposed for funding is a full scale restoration project. The proposed positive barrier project was selected after consideration of other options. Additionally, the feasibility work for Phase I of the project, that is nearing completion, contains a review of project alternatives. NMWC has been considering options to this project, since 1993 and has been consulting with the responsible resource and regulatory agencies, technical committees and local interest groups for over five (5) years. All recommendations to date have led to the selection of a project to consolidate diversions and provide positive barrier screens. Operational changes were rejected due to a lack of any significant storage capacity. Based upon large scale testing at Reclamation District No. 1004 and Reclamation District No. 108, behavioral barriers could not meet the reduction in entrainment efficiencies mandated by NMFS and DFG criteria.

Extensive fisheries monitoring have been performed in the Sacramento River to document species composition, seasonal occurrence and size distribution of juvenile and adult fish in this area of the river. Based upon DFG and NMFS fish screening criteria, resource agencies have estimated the reduction in entrainment losses of juvenile fish to be approximately ninety-five percent (95%) when compared to existing unscreened diversion facilities. As such, the elimination of unscreened diversion and mitigation barriers, which can directly result in the incidental take of protected fish species, has been mandated by the federal and state agencies responsible for protection of these species. NMWC is one of the largest remaining unscreened diversions on the Sacramento River, and this project will, therefore, make a significant step toward addressing the immediate needs of designated at-risk species.

Design reviews by the AFSP technical team will assure that facilities are designed in accordance with NMFS and DFG screening criteria. Monitoring incorporated as part of the project will assure that the facility is constructed and operates in a manner that provides maximum benefit to species of concern.

- e. Education Objectives – The proposed project is not focused on education. However, due to its proximity to the Sacramento area, the constructed facility will present a unique opportunity for use as an education tool. NMWC will work with the City and County of Sacramento to make the site attractive as an educational tool for school groups, environmental interest groups, and other public interest groups.

## **2. Proposed Scope of Work.**

- a. Location and/or Geographic Boundaries of the Project – The project is located in the Sacramento River Watershed in Sacramento and Sutter Counties. The project affects the American Basin, the location of which is shown in the attached Figure 1. The consolidation of diversions along the left bank of the Sacramento River, from about River Mile 65 to River Mile 79 is proposed. Also proposed, is the removal of NMWC's two (2) permanent diversions, and temporary cofferdam, from the Natomas Cross Canal. The Natomas Cross Canal is the tributary to the Sacramento River, at approximately River Mile 79, for the Coon Creek, Bunkham Slough, Markham Ravine, Auburn Ravine, King Slough, Pleasant Grove Creek, and Curry Creek Watersheds, see attached Figure 1.

The proposed project has direct impacts upon the following ecozones:

### **3.5 Sacramento River – Verona to Sacramento**

#### **9.1 American Basin.**

The proposed project controlled is located at about latitude N 38°, 42', 52", longitude W 121°, 36', 27", as shown on the enclosed 1: 100,000 scale Sacramento USGS Quad Map.

- b. Approach – NMWC's intended approach is to perform the required studies, design, and environmental work using the team shown in the Organization Chart, Figure 4, included in Section 2. The proposed schedule and specific tasks are summarized in Figure 5, included in Section 2. The major activities to complete the work, in

chronological order, are to complete a feasibility study which evaluates various alternatives; develop a preliminary design and prepare the required environmental documentation; prepare a Final Design and obtain the required permits; perform the project construction; and test and evaluate the facilities. This proposal requests cost share funding for the work required to complete Phase III *Final Design and Permitting*. The design, environmental documentation, permitting, and construction supervision will be performed by NMWC, with the assistance of the existing team of consultants. All work will be performed in consultation with the Anadromous Fish Screen Program Technical Team, headed by the USFWS. The construction work will be performed by a qualified contractor, under a competitively bid construction contract. Upon start-up and commissioning of the facility, an evaluation and monitoring program will be carried out in consultation with the DFG and the NMFS. NMWC will operate and maintain the facility with in-house staff, who will be trained by the contractor and consultants during start-up.

- c. **Monitoring and Assessment Plans** – Extensive fisheries monitoring have been performed in the Sacramento River to document the species composition, seasonal occurrence, and size distribution of juvenile and adult fish entrained by unscreened diversions. Data from these monitoring programs provides a basis for predicting biological benefits associated with a positive barrier fish screen.

For this restoration project, monitoring and assessment plans will be geared toward assuring compliance with DFG and NMFS screening criteria, and the mitigation plans included the project's environmental documents. The effort will begin during the preliminary design and environmental assessment phase. This work will be performed in consultation with the AFSP technical team, and responsible resource and regulatory agencies as the project proceeds. The Final Design and environmental documentation will be similarly reviewed and approved prior to proceeding with the project construction.

During the Final Design Phase, a specific monitoring and assessment plan for the completed facility will be developed in consultation with the AFSP technical team and other interested parties. This plan will address the requirements for inspections and approvals during construction and the post construction evaluation and monitoring of the facility performance. Construction monitoring will include, but not be limited to, verification of compliance with screen specifications, inspection of channel conditions, and testing of cleaning systems. Post construction evaluation will include extensive measurement of velocities and adjustment of facility as required to meet DFG and NMFS screening criteria. Underwater inspections will be included to monitor facility operation and inspect channel conditions.

Additionally, a long term operation and maintenance plan will be developed to assure continued system integrity and operational compliance with screening criteria. The plan will include, but not be limited to, record keeping requirements, periodic underwater inspections to verify screen integrity, and monitoring of cleaning and sediment control systems operation.

Mitigation and restoration requirements will be developed during preparation of environmental documentation. Requirements for monitoring the success of mitigation and restoration efforts will be developed in consultation with responsible

agencies. Restoration efforts will also be coordinated with the Natomas Basin Habitat Conservation Plan.

- d. Data Handling and Storage – All data developed during the project will be kept on file in the project manager's office. Copies of data prepared digitally will be routinely backed up and when complete archived on CDROM. As information is finalized, reports will be prepared and distributed to all interested parties. Other data will be made available upon written request to NMWC. At the completion of the project all files will be maintained for a minimum of three (3) years.
- e. Expected Products/Outcomes – Expected products of Final Design will include:
- ▶ Geotechnical Report
  - ▶ Topographic Mapping
  - ▶ 35% Design Submittal
  - ▶ 85% Design Submittal
  - ▶ 100% Design Submittal
  - ▶ Bid set of Design Drawings, Specifications and Bid Documents.

These design submittals will be distributed to responsible project participants for review and comment. Additionally regular presentations will be made to AFSP technical team, and CALFED as requested, during development of design.

Expected products of Environmental Documentation and Permitting effort will induce:

- ▶ Public Draft of EA/IS (Internal draft prepared during Phase II)
- ▶ Mitigated Negative Declaration/FONSI or EIR/EIS as required.
- ▶ Permitting per attached Environmental Checklist.

Distribution and reviews of environmental documents will comply with CEQA/NEPA guidelines. Coordination meetings with appropriate Resource/Regulatory Agencies will be organized as required. Presentations will be made to CALFED as requested.

Additionally, NMWC will provide agreements, plans, presentations and reporting as outlined in the PSP, Section 4.2.

- f. Work Schedule – The proposed project schedule is attached as Figure 5. Cost share funding is being requested for Phase III – Final Design and Permitting. The schedule for Phase III is a continuation of work currently being performed on the project Feasibility, Preliminary Design, and Environmental Documentation. The schedule includes detailed start/finish dates for each task. The major milestones are:
- ▶ Completion of Final Design by May 31, 2001
  - ▶ Completion of Environmental Documentation by August 3, 2001
  - ▶ Obtain Permits and Licenses by August 30, 2001

Payments for service contracts will be made on a monthly basis. Service contract invoices will detail man-hours spent on each task, and level of effort will be gaged against the project schedule.



Deliverables associated with milestones are described in paragraph e, *Expected Products/Outcomes*, as described above.

The Final Design task is dependant upon completion of the Geotechnical Investigation, and Surveying and Mapping work as shown on the attached schedule. These two (2) tasks can be completed independently of the Permitting and Licensing effort, but could be incomplete if changes are noted in any subsequent permitting effort.

Completion of the Permitting and Licensing task is dependant upon the preparation of at least a partial Final Design. Some permit applications can be submitted based upon the Preliminary Design and Environmental Documents produced in Phase II, but there is a risk of changes if a more complete design is unavailable.

Without full funding support for the project subject to the approval of the Board of Directors, NMWC may be able to continue some limited work on the final, but at a much reduced level of effort. The project schedule will be moved back indefinitely based upon the level of effort NMWC can afford to fund.

- g. Feasibility – The described approach has been proven successful on a number of large screening projects in the Sacramento Valley and the Pacific Northwest. The project represents a cooperative effort of resource and regulatory agencies and local interests. The initial planning performed by NMWC established the option for removal of facilities from the Natomas Cross Canal, reviewed the potential for operational changes and compared the use of behavioral and physical barriers. The recommendation for consolidation of diversions into one or two diversions with positive barrier screens resulted from this internal planning.

The feasibility study, currently nearing completion, has compared a number of project alternatives to developing the most feasible project. Biological resource studies being performed during the feasibility phase will be used to gage any impacts of the project alternatives for use in decision making. The selection of a project alternative will include consideration of project costs, the ability to fund the project, the potential environmental impacts of each alternative, the ability to address service needs, the ability to operate and maintain project facilities, and the need to maximize restoration efforts.

The preliminary design and environmental documentation phase for the project will immediately follow the feasibility study. (This phase of the project has been fully funded and will be completed by the end of 2000.) The preliminary design will establish the project facility requirements in consultation with responsible agencies. The preliminary environmental documentation work will assess the impacts of the specific project and determine all permitting needs. Upon completion of this phase of the project, the scope of the project will be accurately defined and enable planning of funding needs for project construction.

The Final Design Phase for which this proposal has requested cost share funding has been planned based upon past projects of similar scope. The effort required for completion of Environmental Documentation and Permitting for the project is similarly based upon past projects. The schedule for implementation of this phase

of the project has been developed in consultation with responsible agencies and other interested parties and is considered feasible.

The environmental checklist outlines permitting required for implementation of the entire project, however, these permits are not required for performance of work on this phase of the project. Delays in processing of permit applications could result in a delay in completing the permitting deliverable and as a result, a delay in the start of project construction. No delays are anticipated at this time.

The proposed project is consistent with current zoning regulations and planning ordinances. Project design will comply with applicable standards. Field activities required for this phase of the project will occur on NMWC or Reclamation District No. 1000 (RD1000) property. NMWC has existing access agreements with RD1000 for the joint use facilities which may be effected by this project.

## **D. Applicability to CALFED ERP Goals and Implementation Plan and CVPIA Priorities**

### **1. ERP Goals and CVPIA Priorities.**

This restoration project targets ERP Goals 1, 2, 3, and 4 as outlined in the PSP and the CVPIA Stressors of Quality of Accessible Stream Channel Habitat, Blockage of or Reduced Access to Suitable Habitat, Unscreened or Inadequately Screen Diversions and Excessive Predation as listed in Table 3 of PSP, Attachment G. The project attempts to specifically address the mortality of adult and juvenile winter-run chinook salmon, spring-run chinook salmon, steelhead trout, green sturgeon, splittail, white sturgeon, striped bass, fall-run chinook salmon, and American shad. Improvements proposed will eliminate entrainment mortality, remove blockages to suitable habitats, improve quality of accessible stream channel and riparian habitat, reduce predation losses, and improve water quality.

The proposed project will address the immediate needs of at-risk species by consolidating and screening the facilities of one of the largest remaining unscreened diverters on the Sacramento River. The continuing planning effort has characterized the site conditions, reviewed test results and data on alternative technologies, and is currently geared toward siting. An evaluation and monitoring program to be developed during the Final Design Phase will provide for continuous monitoring and testing of the project.

Removal of diversions from the Natomas Cross Canal and consolidation of diversions will allow for restoration efforts which will improve aquatic, riverine and riparian habitats. Removal of the diversion dam and unscreened pumps from the Natomas Cross Canal will restore a natural flow regime, and enhance access of sensitive fish species to historical spawning habitats and critical rearing habitat. This restoration effort will also assist in preventing straying of migratory fish into the Natomas Cross Canal, and associated predation, by restoring natural outflow from the Natomas Cross Canal. This change will also improve water quality, since all diversions will be from the Sacramento River, where the rate of diversion will be a much smaller percentage of the stream flow. The area on the Sacramento River where the consolidated diversions will be located is heavily channelized due to its proximity to urban areas. Hardpoints have already been established, with levee systems immediately adjacent to the river channel. Consolidation of diversions will assist in restoration of riverine and riparian habitat in the area of abandoned diversions.

The implemented project will provide for a reliable water supply for agriculture and to sustain critical habitat. NMWC provides the vast majority of surface water supply to the Natomas Basin. The rice farming and winter re-flooding of fields practiced in the basin provide critical habitat for waterfowl and at-risk species such as the giant garter snake and Swainson's hawk.

### **2. Relationship to Other Ecosystem Restoration Projects.**

NMWC is one of the largest remaining unscreened diversions on the Sacramento River. A significant effort has been expended to date in screening large diversions from the Sacramento River to prevent entrainment mortality. This project represents a significant step toward screening all large diversions from the Sacramento River.

Removal of the diversion dam from the Natomas Cross Canal is consistent with the restoration efforts to remove migration barriers. Removal of diversion facilities from this tributary is consistent with restoration efforts to prevent straying of migrating fish.

The NMWC is the sole source of surface water supply to areas proposed for restoration by the Natomas Basin Conservancy. This conservancy's restoration effort is dependant on a reliable water supply.

The project is also being coordinated with the American River Basin Cooperating Agencies and Sacramento Area *Water Forum*. NMWC represents the most significant source of supply from the Sacramento River being considered by the *Water Forum*. The City of Sacramento and Placer County Water Agency are currently attempting to dovetail a project that will replace some American River supply with Sacramento River supply from NMWC's new consolidated diversion from the Sacramento River.

### **3. Request for Next-Phase Funding.**

This proposal is the next phase of a project previously funded by CALFED and CVPIA. The previous phase funding was applied to the Feasibility and Biological Resource Studies, and the Preliminary Design and Environmental Assessment. Funding is being requested for the Final Design, Environmental Documentation and Permitting Phase – Phase III. The current status of the project is shown on the attached schedule and is described along with the accomplishments to date in the enclosed Project Status Report.

### **4. Previous Recipients of CALFED or CVPIA Funding.**

This proposal is for the next phase funding for the *American Basin Fish Screen and Habitat Improvement Project* funded under agreements CALFED No. 98-B29 and CVPIA No. 99-FC-20-0165. The current status of the project, and the progress accomplishments of the project to date, are described in the enclosed Project Status Report.

### **5. System Wide Ecosystem Benefits.**

System wide ecosystem benefits are described in Section D.2 above.

## E. Qualifications

**Overview of Team.** NMWC's team for this project will be organized as shown on the Organization Chart, Figure 4. NMWC's consultants were selected based upon qualifications and their familiarity with NMWC's operation and facilities. The Project Manager and Engineer for the project, Ensign & Buckley Consulting Engineers (EB), has been providing engineering services to NMWC for over 14 years. EB has provided services in the planning, design, and construction of over ten fish screen projects in the State of California, and has worked on all of NMWC's existing diversions. The Environmental Consultant for the project, Miriam Green Associates (MGA) has performed extensive work in the American Basin and has a great deal of experience with rare, threatened, and endangered species. MGA has extensive experience in the preparation and management of CEQA/NEPA compliance documents. The Fisheries Biologist for the project, Hanson Environmental, Inc. (Hanson), is a well-respected biological consulting firm, specializing in fisheries protection. Hanson's team has performed a number of fisheries monitoring studies in the area, and has prepared environmental documents and permit applications for several screening projects.

**Relevant Experience of Key Personnel.** Following is a summary of the relevant experience of the supervisory and key staff:

- a. **Ferrel H. Ensign** is a Registered Civil and Agricultural Engineer in the State of California. Mr. Ensign is a founding partner in Ensign & Buckley Consulting Engineers, a Fellow in ASCE, and has 36 years of experience in the planning, design, and construction of water resource projects. He has been responsible for the design of over 10 fish screens that have been constructed and in the preliminary design of other facilities that were subsequently constructed. He is knowledgeable of the current fish screening criteria of the NMFS and DFG. He has designed sediment exclusion facilities for pumped and gravity irrigation diversions, and hydroelectric facilities. He has acted as the Program Manager on numerous major water resource projects for both private and public agencies including the supervision of the design criteria preparation, plans preparation, specifications preparation, construction management, and start-up testing.
- b. **Miriam Green** has 15 years of experience in the environmental consulting field. Much of this time has been spent conducting biological studies, with particular emphasis on threatened and endangered species surveys throughout California and the Pacific Northwest. Ms. Green is the owner and Principal Biologist of the environmental consulting firm Miriam Green Associates. Established in November 1989, MGA is certified by the State of California and the City of Sacramento as a Women-Owned Small Business. The firm is composed of an experienced group of independent consultants from Sacramento, Yolo, and San Joaquin counties. All group members have extensive prior experience working for other environmental consulting firms, either as permanent staff members or as subcontractors. Collectively, MGA has been involved in the preparation and management of more than 300 Environmental Impact Reports (EIRs), Environmental Impact Statements (EISs), Initial Studies, Biological Assessments, and other documentation, as required by the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) over the past 15 years.
- c. **Dr. Charles H. Hanson** is a professional fisheries biologist, with over 20 years of experience in addressing fisheries issues on the Sacramento River and Bay-Delta system. Dr. Hanson has supervised biological assessments and monitoring programs at over 15 major water diversions. He has supervised the preparation of over 75 technical reports and papers addressing intake screening issues, and has prepared environmental documentation, permit

applications, and environmental monitoring and compliance programs for a large number of water diversions on the Sacramento River and elsewhere.

- d. **Peter Hughes** is the General Manager for NMWC, with 9 years of experience in the agricultural water industry. He has worked for NMWC for over 9 years, and has extensive knowledge of water rights and related water issues. Mr. Hughes helped found NCWA; was a former executive committee member of the Sacramento River Contractors Association, and has been on various committees for the Sacramento Region Water Forums. He has extensive prior experience in management of commercial firms, including placement of public and private financing. He is familiar with senior level financial reporting.
- e. **Thomas Barandas** is the Special Projects Manager for NMWC, and is a life-long resident of American Basin. He has worked in the agricultural industry all of his life. His responsibilities include overseeing the irrigation, recycle and drainage system, and pumping plant operation; including supervision of field staff, and developing, implementing, and reporting for maintenance budgets.
- f. **Stephen R. Sullivan** is a Registered Civil Engineer in the State of California, with a background in design and construction of fish screening facilities, pumping plants, levee construction, and irrigation facilities. He is experienced in the application of the NMFS and the DFG fish screen criteria, and is familiar with the latest technologies in the field and the latest designs used on the Sacramento River. He also has experience in coordination with the agencies on the Anadromous Fish Screen Program Technical Team and is familiar with the U.S. Army Corps of Engineers's, the Reclamation Board's, and the DFG's requirements for in river construction activities. Recent projects include: designed Reclamation District No. 1004's Princeton Pumping Plant Fish Screen Facility; designed El Dorado Hydroelectric Project Screened Diversion on American River; performing feasibility work on White Mallard Dam and Associated Diversion on Butte Creek; prepared long-term planning studies for screening the Natomas Mutual Water Company's five (5) Sacramento River Diversions; evaluated improvements to the Northern California Power Authority's Beaver Creek Diversion; and prepared design details for the preliminary design of new fish screening facility for PG&E's intake on the Eel River. He has also designed and supervised the construction of a number of facilities on the Sacramento River and its tributaries.

## **F. Cost**

### **1. Budget.**

NMWC is requesting cost share funding for Final Design and Permitting, Phase III of the project. Funding will be used to:

- Perform topographic surveys and geophysical studies
- Prepare final design and contract documents
- Prepare a public draft and final environmental documentation
- Obtain permits and licenses/ESA consultation
- Prepare Project Evaluation and Monitoring plan
- Perform Project Management

The budgeted costs requested for each task are identified in Table 1. The proposed budget for Phase III is \$1,900,000. NMWC is requesting a fifty percent (50%) cost share, or a total of \$950,000, from CALFED as identified in Table 2. Based upon the size of the overall project, the proposed budget is commensurate with the effort required to complete the work required.

All of the work will be performed under service contracts with the exception of administration work which will be performed by NMWC. The list of proposed consultants and a breakdown of estimated amounts charged salaries and other direct costs are included in Table 3. No equipment purchases are anticipated.

Consultant's overhead costs are encompassed in charge rates. NMWC is not intending to apply additional overhead charges for work performed.

The Project Management task budgets for the effort allotted to managing the completion of tasks, subconsultant and agency coordination, compliance with reporting requirements, processing of funding requirements, compliance with standard terms and conditions, and the associated direct costs.

### **2. Cost-Sharing.**

NMWC began studies of the project in 1993, and funded all work on the project through 1999. A total of \$450,000 in funding was provided by CALFED and CVPIA for the previous phase of the project. This Phase I and II funding was allotted for work in 1999 and 2000. NMWC is now seeking \$950,000 from CALFED for a fifty percent (50%) cost share of Phase III work in 2001. In conjunction with this request, NMWC will be requesting Federal Funding for the remaining Phase III cost share.

Without full funding support for the project subject to the approval of the Board of Directors, NMWC may be able to continue some limited work on the final, but at a much reduced level of effort. The project schedule will be moved back indefinitely based upon the level of effort NMWC can afford to fund.

## G. Local Involvement

This project is the single-purpose, or first phase, of a larger, multipurpose project benefitting several communities. Therefore, public outreach efforts, already well underway, must address the interests of company shareholders, as well as a number of specific communities, namely, the City of Sacramento, the County of Sacramento, Landowners within Pleasant Grove – Verona, the County of Sutter, RD1000, and the County of Placer. The member agencies of the Sacramento North Area Groundwater Management Authority (SNAGMA), member agencies of The American River Basin Cooperating Agencies (ARBCA), member agencies of The Sacramento Metropolitan Water Authority (SMWA), the signatures of The Sacramento City/County Office of Metropolitan Water Planning's "*Water Forums*," and the member firms and interests of the Environmental Council of Sacramento (ECOS).

This project has been discussed regionally since 1994, and reviewed publicly and recommended for completion in the "Water Forums Agreement," (April, 2000) which was signed by over fifty (50) local and regional groups, including Federal and State agencies. Virtually ninety-nine percent (99%) of the agencies, organizations, and interest groups listed above are signatories of that agreement.

The NMWC has met and briefed all of those entities above, and is expecting consensus support for the project. In order to formalize and assure local involvement and support, the NMWC will continue its role in the "Water Forums" Successor Effort, SNAGMA as a governing board member, and maintain regular monthly meetings to which all interest groups are invited. A significant environmental interest group not specifically listed above is the City of Sacramento's Habitat Plan Operator, The Natomas Basin Conservancy (NBC), charged with the protection of endangered, threatened and of-concern species within the NMWC service area.

The NMWC been elected by board vote to a position on the NBC Board of Directors to assure continuity and integration of species protection management practices with the operations and maintenance practices of both RD1000's flood control and NMWC's water supply requirements. The NMWC has submitted a Habitat Plan to USFWS for approval and expects to report annually to the NBC on its activities.



## **H. Compliance with Standard Terms and Conditions**

NMWC has reviewed the Standard Terms and Conditions contained in Attachments D and E to the PSP, and will comply with the state and federal standard terms. Through previous funding agreements, NMWC is familiar with both the application of state and federal standard clauses and has the ability to implement them. The proposal submittal requirements, as requested in the PSP, are attached to this proposal.

## **I. Literature Cited**

CALFED Bay-Delta Program. 2000. Ecosystem Restoration Projects and Programs, 2001. Proposal Solicitation Package

U.S. Fish and Wildlife Service June 1999. Six-Year Plan and Budget for Implementing the Central Valley Project Improvement Act, Fiscal Years 1999 - 2004

Hanson, C.H. 1996 (Attached)

U.S. Fish and Wildlife Service. May 1997. Revised Draft Restoration Plan for the AFRP

## **J. Threshold Requirements**

The requested Letters of Notification, Environmental Compliance Check List, Land Use Checklist, and Contract Forms are attached to this proposal.

## **Executive Summary**

### **Project Title and Applicant Name:**

*Title:* American Basin Fish Screen and Habitat Improvement Project  
*Applicant:* Natomas Mutual Water Company (NMWC)

### **Project Description and Primary Biological/Ecological Objectives:**

This proposal requests cost share funding to perform the final design, complete the environmental documents, and to obtain the necessary permits and licenses for the *American Basin Fish Screen and Habitat Improvement Project*. The project involves the removal of a diversion dam, the consolidation of diversions, and the addition of state-of-the-art fish screens to NMWC's diversions on the Sacramento River, between Verona and the American River, and on the Cross Canal. The specific objectives of the project are to remove migration barriers; prevent straying and entrainment of winter-run Chinook salmon, spring-run Chinook salmon, fall-run Chinook salmon, late fall-run Chinook salmon, steelhead trout, splittail, green sturgeon, and other high risk species; and to improve aquatic, riverine, and riparian habitat.

### **Approach/Tasks/Schedule:**

NMWC's intended approach is to complete the design and environmental documentation in consultation with the responsible resource and regulatory agencies, obtain the necessary permits, procure the required right-of-way, obtain bids for construction, perform the relocation work, construct the fish screen facility, and monitor its effectiveness. The design, environmental documentation, and project management will be performed by NMWC with the assistance of consultants.

The project phase for which funding is requested is Phase III – *Final Design & Permitting*. The primary tasks being performed under Phase III are the completion of a final design, completion of environmental documentation and permitting, securing right of-way for construction, and preparation of a competitive bid package for the project. Phase III is currently scheduled for completion by the end of 2001.

### **Justification for Project and Funding by CALFED:**

The elimination of migration barriers and entrainment losses at unscreened diversions, which result in direct mortality to at-risk fishery resources, as well as the lack of critical rearing habitat, have been identified as principal stressors by CALFED and CVPIA, and will be addressed by this project. Biological monitoring has documented that winter-run, spring-run, fall-run, and late fall-run sized juvenile Chinook salmon, steelhead, splittail, and other at-risk resident and migratory fish species are currently entrained at similar unscreened diversions. The restoration project is, therefore, consistent with CALFED ERP strategic goals for the 2001 Implementation Plan and CVPIA priorities.

### **Budget Costs:**

NMWC is seeking a \$950,000 cost share for the final design and permitting phase of the project. The project represents a cooperative effort with significant financial matching support through the CVPIA Anadromous Fish Restoration Program. The balance of funding for this phase of the project will be paid for by the federal government and/or local cost share.

### **Local Support/Coordination with Other Programs:**

NMWC's shareholders, local agencies, and water purveyors have expressed strong support for the project. NMWC has provided funding for the project prior to Phase I funding by the CALFED/CVPIA agreement, and expects to provide future financial support for the project.

The work for this project is being coordinated with the CVPIA Anadromous Fish Restoration Program (AFRP), through consultation with its technical team. Coordination with the AFRP technical team will be continued through the design, construction, and monitoring phases of the project.

# **Proposal for American Basin Fish Screen and Habitat Improvement Project**

## **C. Project Description**

### **1. Statement of the Problem.**

- a. Problem – This Proposal requests cost share funding from CALFED to perform the Final Design and Permitting required for Natomas Mutual Water Company's (NMWC) American Fish Screen and Habitat Improvement Project. The specific goal of the project is to remove a fish negative barrier, improve habitat, and prevent entrainment of winter-run chinook salmon, spring-run chinook salmon, fall-run chinook salmon, late fall-run chinook salmon, splittail, steelhead trout, green sturgeon, and other high risk species.

NMWC is a non-profit mutual water company that controls surface water rights for over 250 landowners within the 55,000 acres known as the American Basin. As part of its irrigation system, NMWC operates five (5) unscreened diversions, with a total capacity of about 630 cfs. In addition, during some dry years, NMWC installs a dam at the mouth of the Natomas Cross Canal and installs diesel lift pumps to draw water from the Sacramento River into the Natomas Cross Canal. The Natomas Cross Canal is a tributary to the Sacramento River, which channelizes flow from a number of creeks to the east (refer to attached Figure 1 and paragraph 2.a., below). A map of NMWC's existing facilities is included as Figure 2, attached.

NMWC began the planning effort for this project in 1993. Initial studies by NMWC looked at operational changes, the use of alternative type barriers, and the relocation or consolidation of diversions. As a result of this initial planning, NMWC has proposed a project to remove a diversion dam and pumps from the Natomas Cross Canal, consolidate their five diversions to one or two facilities located on the Sacramento River, and provide positive barrier fish screens on the consolidated Sacramento River diversion(s).

NMWC has been coordinating the proposed project with local interest groups, resource and regulatory agencies, and funding agencies for over five (5) years. The project has been complicated by proposals from resource and local agencies which could effect the scope of the project. The Department of Water Resources (DWR) is proposing a conjunctive use project for the American Basin, which centered on operational changes in NMWC's service area. The Placer County Water Agency, City of Sacramento, and the American River Basin Cooperating Agencies are studying the relocation of some American River diversions to the Sacramento River, by use of a combined diversion with NMWC. NMWC will coordinate the project with these entities, but intends to move forward with the design of facilities to meet their present needs.

The proposed project will remove a mitigation barrier, remove all diversion facilities from the Cross Canal, consolidate diversion locations, provide positive barrier fish screens, and assist in restoration of aquatic, riverine, and riparian habitat. Entrainment caused by unscreened diversions, blockage of suitable habitat, lack of

quality stream channel and riparian habitats, and excessive predation has been identified as key stressors affecting anadromous fish species in this area. The project attempts to protect anadromous fish species by addressing NMWC's potential impact upon these stressors, and to assure a stable water supply to upland habitat considered critical to other at-risk species such as the giant garter snake and the Swainson's hawk.

- b. Conceptual Model – The proposed project is a full scale implementation project to remove a fish negative barrier, consolidate diversions, and screen diversions.

Removal of the diversion dam will eliminate the isolation of a side channel and tributary to the Sacramento River. In concept, removal of this barrier will partially restore a natural flow regime and enhance access of sensitive fish species to historical spawning habitats and critical rearing habitat.

Consolidation of diversions will restore critical habitat and reduce exposure of sensitive fish species to diversions. Removal of diversions from the Natomas Cross Canal will assist in restoration of natural flow regimes and restoration of riparian and riverine habitat. In concept, this action will reduce potential for entrainment, assist in restoration of critical rearing habitat and reduce potential for straying of migrating anadromous fish species.

Installation of positive barrier screens will result in a substantial reduction of entrainment mortality to winter-run chinook salmon, spring-run chinook salmon, steelhead trout, green sturgeon, splittail, white sturgeon, striped bass, fall-run chinook salmon, and American shad. Based upon DFG and NMFS fish screen criteria, resource agencies have estimated the reduction in entrainment losses of juvenile fish (e.g., juvenile chinook salmon) to be approximately ninety-five percent (95%) when compared with an existing unscreened diversion facility.

- c. Hypotheses Being Tested – This implementation project does not specifically test or compare any hypotheses. The restoration project targets CALFED goals 1, 2, 3, and 4 as provided in the PSP and the CVPIA stressors of Quality of Accessible Stream Channel and Riparian Habitat, Blockage of or Reduced Access to Suitable Habitat, Unscreened or Inadequately Screen Diversions, and Excessive Predation, as listed in Table 3 of PSP, Attachment G.
- d. Adaptive Management – The project proposed for funding is a full scale restoration project. The proposed positive barrier project was selected after consideration of other options. Additionally, the feasibility work for Phase I of the project, that is nearing completion, contains a review of project alternatives. NMWC has been considering options to this project, since 1993 and has been consulting with the responsible resource and regulatory agencies, technical committees and local interest groups for over five (5) years. All recommendations to date have led to the selection of a project to consolidate diversions and provide positive barrier screens. Operational changes were rejected due to a lack of any significant storage capacity. Based upon large scale testing at Reclamation District No. 1004 and Reclamation District No. 108, behavioral barriers could not meet the reduction in entrainment efficiencies mandated by NMFS and DFG criteria.

Extensive fisheries monitoring have been performed in the Sacramento River to document species composition, seasonal occurrence and size distribution of juvenile and adult fish in this area of the river. Based upon DFG and NMFS fish screening criteria, resource agencies have estimated the reduction in entrainment losses of juvenile fish to be approximately ninety-five percent (95%) when compared to existing unscreened diversion facilities. As such, the elimination of unscreened diversion and mitigation barriers, which can directly result in the incidental take of protected fish species, has been mandated by the federal and state agencies responsible for protection of these species. NMWC is one of the largest remaining unscreened diversions on the Sacramento River, and this project will, therefore, make a significant step toward addressing the immediate needs of designated at-risk species.

Design reviews by the AFSP technical team will assure that facilities are designed in accordance with NMFS and DFG screening criteria. Monitoring incorporated as part of the project will assure that the facility is constructed and operates in a manner that provides maximum benefit to species of concern.

- e. Education Objectives – The proposed project is not focused on education. However, due to its proximity to the Sacramento area, the constructed facility will present a unique opportunity for use as an education tool. NMWC will work with the City and County of Sacramento to make the site attractive as an educational tool for school groups, environmental interest groups, and other public interest groups.

## **2. Proposed Scope of Work.**

- a. Location and/or Geographic Boundaries of the Project – The project is located in the Sacramento River Watershed in Sacramento and Sutter Counties. The project affects the American Basin, the location of which is shown in the attached Figure 1. The consolidation of diversions along the left bank of the Sacramento River, from about River Mile 65 to River Mile 79 is proposed. Also proposed, is the removal of NMWC's two (2) permanent diversions, and temporary cofferdam, from the Natomas Cross Canal. The Natomas Cross Canal is the tributary to the Sacramento River, at approximately River Mile 79, for the Coon Creek, Bunkham Slough, Markham Ravine, Auburn Ravine, King Slough, Pleasant Grove Creek, and Curry Creek Watersheds, see attached Figure 1.

The proposed project has direct impacts upon the following ecozones:

### **3.5 Sacramento River – Verona to Sacramento**

#### **9.1 American Basin.**

The proposed project controlled is located at about latitude N 38°, 42', 52", longitude W 121°, 36', 27", as shown on the enclosed 1: 100,000 scale Sacramento USGS Quad Map.

- b. Approach – NMWC's intended approach is to perform the required studies, design, and environmental work using the team shown in the Organization Chart, Figure 4, included in Section 2. The proposed schedule and specific tasks are summarized in Figure 5, included in Section 2. The major activities to complete the work, in

chronological order, are to complete a feasibility study which evaluates various alternatives; develop a preliminary design and prepare the required environmental documentation; prepare a Final Design and obtain the required permits; perform the project construction; and test and evaluate the facilities. This proposal requests cost share funding for the work required to complete Phase III *Final Design and Permitting*. The design, environmental documentation, permitting, and construction supervision will be performed by NMWC, with the assistance of the existing team of consultants. All work will be performed in consultation with the Anadromous Fish Screen Program Technical Team, headed by the USFWS. The construction work will be performed by a qualified contractor, under a competitively bid construction contract. Upon start-up and commissioning of the facility, an evaluation and monitoring program will be carried out in consultation with the DFG and the NMFS. NMWC will operate and maintain the facility with in-house staff, who will be trained by the contractor and consultants during start-up.

- c. Monitoring and Assessment Plans – Extensive fisheries monitoring have been performed in the Sacramento River to document the species composition, seasonal occurrence, and size distribution of juvenile and adult fish entrained by unscreened diversions. Data from these monitoring programs provides a basis for predicting biological benefits associated with a positive barrier fish screen.

For this restoration project, monitoring and assessment plans will be geared toward assuring compliance with DFG and NMFS screening criteria, and the mitigation plans included the project's environmental documents. The effort will begin during the preliminary design and environmental assessment phase. This work will be performed in consultation with the AFSP technical team, and responsible resource and regulatory agencies as the project proceeds. The Final Design and environmental documentation will be similarly reviewed and approved prior to proceeding with the project construction.

During the Final Design Phase, a specific monitoring and assessment plan for the completed facility will be developed in consultation with the AFSP technical team and other interested parties. This plan will address the requirements for inspections and approvals during construction and the post construction evaluation and monitoring of the facility performance. Construction monitoring will include, but not be limited to, verification of compliance with screen specifications, inspection of channel conditions, and testing of cleaning systems. Post construction evaluation will include extensive measurement of velocities and adjustment of facility as required to meet DFG and NMFS screening criteria. Underwater inspections will be included to monitor facility operation and inspect channel conditions.

Additionally, a long term operation and maintenance plan will be developed to assure continued system integrity and operational compliance with screening criteria. The plan will include, but not be limited to, record keeping requirements, periodic underwater inspections to verify screen integrity, and monitoring of cleaning and sediment control systems operation.

Mitigation and restoration requirements will be developed during preparation of environmental documentation. Requirements for monitoring the success of mitigation and restoration efforts will be developed in consultation with responsible

agencies. Restoration efforts will also be coordinated with the Natomas Basin Habitat Conservation Plan.

- d. Data Handling and Storage – All data developed during the project will be kept on file in the project manager's office. Copies of data prepared digitally will be routinely backed up and when complete archived on CDROM. As information is finalized, reports will be prepared and distributed to all interested parties. Other data will be made available upon written request to NMWC. At the completion of the project all files will be maintained for a minimum of three (3) years.
- e. Expected Products/Outcomes – Expected products of Final Design will include:
  - ▶ Geotechnical Report
  - ▶ Topographic Mapping
  - ▶ 35% Design Submittal
  - ▶ 85% Design Submittal
  - ▶ 100% Design Submittal
  - ▶ Bid set of Design Drawings, Specifications and Bid Documents.

These design submittals will be distributed to responsible project participants for review and comment. Additionally regular presentations will be made to AFSP technical team, and CALFED as requested, during development of design.

Expected products of Environmental Documentation and Permitting effort will induce:

- ▶ Public Draft of EA/IS (Internal draft prepared during Phase II)
- ▶ Mitigated Negative Declaration/FONSI or EIR/EIS as required.
- ▶ Permitting per attached Environmental Checklist.

Distribution and reviews of environmental documents will comply with CEQA/NEPA guidelines. Coordination meetings with appropriate Resource/Regulatory Agencies will be organized as required. Presentations will be made to CALFED as requested.

Additionally, NMWC will provide agreements, plans, presentations and reporting as outlined in the PSP, Section 4.2.

- f. Work Schedule – The proposed project schedule is attached as Figure 5. Cost share funding is being requested for Phase III – Final Design and Permitting. The schedule for Phase III is a continuation of work currently being performed on the project Feasibility, Preliminary Design, and Environmental Documentation. The schedule includes detailed start/finish dates for each task. The major milestones are:
  - ▶ Completion of Final Design by May 31, 2001
  - ▶ Completion of Environmental Documentation by August 3, 2001
  - ▶ Obtain Permits and Licenses by August 30, 2001

Payments for service contracts will be made on a monthly basis. Service contract invoices will detail man-hours spent on each task, and level of effort will be gaged against the project schedule.

Deliverables associated with milestones are described in paragraph e, *Expected Products/Outcomes*, as described above.

The Final Design task is dependant upon completion of the Geotechnical Investigation, and Surveying and Mapping work as shown on the attached schedule. These two (2) tasks can be completed independently of the Permitting and Licensing effort, but could be incomplete if changes are noted in any subsequent permitting effort.

Completion of the Permitting and Licensing task is dependant upon the preparation of at least a partial Final Design. Some permit applications can be submitted based upon the Preliminary Design and Environmental Documents produced in Phase II, but there is a risk of changes if a more complete design is unavailable.

Without full funding support for the project subject to the approval of the Board of Directors, NMWC may be able to continue some limited work on the final, but at a much reduced level of effort. The project schedule will be moved back indefinitely based upon the level of effort NMWC can afford to fund.

- g. Feasibility – The described approach has been proven successful on a number of large screening projects in the Sacramento Valley and the Pacific Northwest. The project represents a cooperative effort of resource and regulatory agencies and local interests. The initial planning performed by NMWC established the option for removal of facilities from the Natomas Cross Canal, reviewed the potential for operational changes and compared the use of behavioral and physical barriers. The recommendation for consolidation of diversions into one or two diversions with positive barrier screens resulted from this internal planning.

The feasibility study, currently nearing completion, has compared a number of project alternatives to developing the most feasible project. Biological resource studies being performed during the feasibility phase will be used to gage any impacts of the project alternatives for use in decision making. The selection of a project alternative will include consideration of project costs, the ability to fund the project, the potential environmental impacts of each alternative, the ability to address service needs, the ability to operate and maintain project facilities, and the need to maximize restoration efforts.

The preliminary design and environmental documentation phase for the project will immediately follow the feasibility study. (This phase of the project has been fully funded and will be completed by the end of 2000.) The preliminary design will establish the project facility requirements in consultation with responsible agencies. The preliminary environmental documentation work will assess the impacts of the specific project and determine all permitting needs. Upon completion of this phase of the project, the scope of the project will be accurately defined and enable planning of funding needs for project construction.

The Final Design Phase for which this proposal has requested cost share funding has been planned based upon past projects of similar scope. The effort required for completion of Environmental Documentation and Permitting for the project is similarly based upon past projects. The schedule for implementation of this phase



of the project has been developed in consultation with responsible agencies and other interested parties and is considered feasible.

The environmental checklist outlines permitting required for implementation of the entire project, however, these permits are not required for performance of work on this phase of the project. Delays in processing of permit applications could result in a delay in completing the permitting deliverable and as a result, a delay in the start of project construction. No delays are anticipated at this time.

The proposed project is consistent with current zoning regulations and planning ordinances. Project design will comply with applicable standards. Field activities required for this phase of the project will occur on NMWC or Reclamation District No. 1000 (RD1000) property. NMWC has existing access agreements with RD1000 for the joint use facilities which may be effected by this project.

## **D. Applicability to CALFED ERP Goals and Implementation Plan and CVPIA Priorities**

### **1. ERP Goals and CVPIA Priorities.**

This restoration project targets ERP Goals 1, 2, 3, and 4 as outlined in the PSP and the CVPIA Stressors of Quality of Accessible Stream Channel Habitat, Blockage of or Reduced Access to Suitable Habitat, Unscreened or Inadequately Screen Diversions and Excessive Predation as listed in Table 3 of PSP, Attachment G. The project attempts to specifically address the mortality of adult and juvenile winter-run chinook salmon, spring-run chinook salmon, steelhead trout, green sturgeon, splittail, white sturgeon, striped bass, fall-run chinook salmon, and American shad. Improvements proposed will eliminate entrainment mortality, remove blockages to suitable habitats, improve quality of accessible stream channel and riparian habitat, reduce predation losses, and improve water quality.

The proposed project will address the immediate needs of at-risk species by consolidating and screening the facilities of one of the largest remaining unscreened diverters on the Sacramento River. The continuing planning effort has characterized the site conditions, reviewed test results and data on alternative technologies, and is currently geared toward siting. An evaluation and monitoring program to be developed during the Final Design Phase will provide for continuous monitoring and testing of the project.

Removal of diversions from the Natomas Cross Canal and consolidation of diversions will allow for restoration efforts which will improve aquatic, riverine and riparian habitats. Removal of the diversion dam and unscreened pumps from the Natomas Cross Canal will restore a natural flow regime, and enhance access of sensitive fish species to historical spawning habitats and critical rearing habitat. This restoration effort will also assist in preventing straying of migratory fish into the Natomas Cross Canal, and associated predation, by restoring natural outflow from the Natomas Cross Canal. This change will also improve water quality, since all diversions will be from the Sacramento River, where the rate of diversion will be a much smaller percentage of the stream flow. The area on the Sacramento River where the consolidated diversions will be located is heavily channelized due to its proximity to urban areas. Hardpoints have already been established, with levee systems immediately adjacent to the river channel. Consolidation of diversions will assist in restoration of riverine and riparian habitat in the area of abandoned diversions.

The implemented project will provide for a reliable water supply for agriculture and to sustain critical habitat. NMWC provides the vast majority of surface water supply to the Natomas Basin. The rice farming and winter re-flooding of fields practiced in the basin provide critical habitat for waterfowl and at-risk species such as the giant garter snake and Swainson's hawk.

### **2. Relationship to Other Ecosystem Restoration Projects.**

NMWC is one of the largest remaining unscreened diversions on the Sacramento River. A significant effort has been expended to date in screening large diversions from the Sacramento River to prevent entrainment mortality. This project represents a significant step toward screening all large diversions from the Sacramento River.

Removal of the diversion dam from the Natomas Cross Canal is consistent with the restoration efforts to remove migration barriers. Removal of diversion facilities from this tributary is consistent with restoration efforts to prevent straying of migrating fish.

The NMWC is the sole source of surface water supply to areas proposed for restoration by the Natomas Basin Conservancy. This conservancy's restoration effort is dependant on a reliable water supply.

The project is also being coordinated with the American River Basin Cooperating Agencies and Sacramento Area *Water Forum*. NMWC represents the most significant source of supply from the Sacramento River being considered by the *Water Forum*. The City of Sacramento and Placer County Water Agency are currently attempting to dovetail a project that will replace some American River supply with Sacramento River supply from NMWC's new consolidated diversion from the Sacramento River.

### **3. Request for Next-Phase Funding.**

This proposal is the next phase of a project previously funded by CALFED and CVPIA. The previous phase funding was applied to the Feasibility and Biological Resource Studies, and the Preliminary Design and Environmental Assessment. Funding is being requested for the Final Design, Environmental Documentation and Permitting Phase – Phase III. The current status of the project is shown on the attached schedule and is described along with the accomplishments to date in the enclosed Project Status Report.

### **4. Previous Recipients of CALFED or CVPIA Funding.**

This proposal is for the next phase funding for the *American Basin Fish Screen and Habitat Improvement Project* funded under agreements CALFED No. 98-B29 and CVPIA No. 99-FC-20-0165. The current status of the project, and the progress accomplishments of the project to date, are described in the enclosed Project Status Report.

### **5. System Wide Ecosystem Benefits.**

System wide ecosystem benefits are described in Section D.2 above.

## E. Qualifications

**Overview of Team.** NMWC's team for this project will be organized as shown on the Organization Chart, Figure 4. NMWC's consultants were selected based upon qualifications and their familiarity with NMWC's operation and facilities. The Project Manager and Engineer for the project, Ensign & Buckley Consulting Engineers (EB), has been providing engineering services to NMWC for over 14 years. EB has provided services in the planning, design, and construction of over ten fish screen projects in the State of California, and has worked on all of NMWC's existing diversions. The Environmental Consultant for the project, Miriam Green Associates (MGA) has performed extensive work in the American Basin and has a great deal of experience with rare, threatened, and endangered species. MGA has extensive experience in the preparation and management of CEQA/NEPA compliance documents. The Fisheries Biologist for the project, Hanson Environmental, Inc. (Hanson), is a well-respected biological consulting firm, specializing in fisheries protection. Hanson's team has performed a number of fisheries monitoring studies in the area, and has prepared environmental documents and permit applications for several screening projects.

**Relevant Experience of Key Personnel.** Following is a summary of the relevant experience of the supervisory and key staff:

- a. **Ferrel H. Ensign** is a Registered Civil and Agricultural Engineer in the State of California. Mr. Ensign is a founding partner in Ensign & Buckley Consulting Engineers, a Fellow in ASCE, and has 36 years of experience in the planning, design, and construction of water resource projects. He has been responsible for the design of over 10 fish screens that have been constructed and in the preliminary design of other facilities that were subsequently constructed. He is knowledgeable of the current fish screening criteria of the NMFS and DFG. He has designed sediment exclusion facilities for pumped and gravity irrigation diversions, and hydroelectric facilities. He has acted as the Program Manager on numerous major water resource projects for both private and public agencies including the supervision of the design criteria preparation, plans preparation, specifications preparation, construction management, and start-up testing.
- b. **Miriam Green** has 15 years of experience in the environmental consulting field. Much of this time has been spent conducting biological studies, with particular emphasis on threatened and endangered species surveys throughout California and the Pacific Northwest. Ms. Green is the owner and Principal Biologist of the environmental consulting firm Miriam Green Associates. Established in November 1989, MGA is certified by the State of California and the City of Sacramento as a Women-Owned Small Business. The firm is composed of an experienced group of independent consultants from Sacramento, Yolo, and San Joaquin counties. All group members have extensive prior experience working for other environmental consulting firms, either as permanent staff members or as subcontractors. Collectively, MGA has been involved in the preparation and management of more than 300 Environmental Impact Reports (EIRs), Environmental Impact Statements (EISs), Initial Studies, Biological Assessments, and other documentation, as required by the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) over the past 15 years.
- c. **Dr. Charles H. Hanson** is a professional fisheries biologist, with over 20 years of experience in addressing fisheries issues on the Sacramento River and Bay-Delta system. Dr. Hanson has supervised biological assessments and monitoring programs at over 15 major water diversions. He has supervised the preparation of over 75 technical reports and papers addressing intake screening issues, and has prepared environmental documentation, permit

applications, and environmental monitoring and compliance programs for a large number of water diversions on the Sacramento River and elsewhere.

- d. **Peter Hughes** is the General Manager for NMWC, with 9 years of experience in the agricultural water industry. He has worked for NMWC for over 9 years, and has extensive knowledge of water rights and related water issues. Mr. Hughes helped found NCWA; was a former executive committee member of the Sacramento River Contractors Association, and has been on various committees for the Sacramento Region Water Forums. He has extensive prior experience in management of commercial firms, including placement of public and private financing. He is familiar with senior level financial reporting.
- e. **Thomas Barandas** is the Special Projects Manager for NMWC, and is a life-long resident of American Basin. He has worked in the agricultural industry all of his life. His responsibilities include overseeing the irrigation, recycle and drainage system, and pumping plant operation; including supervision of field staff, and developing, implementing, and reporting for maintenance budgets.
- f. **Stephen R. Sullivan** is a Registered Civil Engineer in the State of California, with a background in design and construction of fish screening facilities, pumping plants, levee construction, and irrigation facilities. He is experienced in the application of the NMFS and the DFG fish screen criteria, and is familiar with the latest technologies in the field and the latest designs used on the Sacramento River. He also has experience in coordination with the agencies on the Anadromous Fish Screen Program Technical Team and is familiar with the U.S. Army Corps of Engineers's, the Reclamation Board's, and the DFG's requirements for in river construction activities. Recent projects include: designed Reclamation District No. 1004's Princeton Pumping Plant Fish Screen Facility; designed El Dorado Hydroelectric Project Screened Diversion on American River; performing feasibility work on White Mallard Dam and Associated Diversion on Butte Creek; prepared long-term planning studies for screening the Natomas Mutual Water Company's five (5) Sacramento River Diversions; evaluated improvements to the Northern California Power Authority's Beaver Creek Diversion; and prepared design details for the preliminary design of new fish screening facility for PG&E's intake on the Eel River. He has also designed and supervised the construction of a number of facilities on the Sacramento River and its tributaries.

## **F. Cost**

### **1. Budget.**

NMWC is requesting cost share funding for Final Design and Permitting, Phase III of the project. Funding will be used to:

- Perform topographic surveys and geophysical studies
- Prepare final design and contract documents
- Prepare a public draft and final environmental documentation
- Obtain permits and licenses/ESA consultation
- Prepare Project Evaluation and Monitoring plan
- Perform Project Management

The budgeted costs requested for each task are identified in Table 1. The proposed budget for Phase III is \$1,900,000. NMWC is requesting a fifty percent (50%) cost share, or a total of \$950,000, from CALFED as identified in Table 2. Based upon the size of the overall project, the proposed budget is commensurate with the effort required to complete the work required.

All of the work will be performed under service contracts with the exception of administration work which will be performed by NMWC. The list of proposed consultants and a breakdown of estimated amounts charged salaries and other direct costs are included in Table 3. No equipment purchases are anticipated.

Consultant's overhead costs are encompassed in charge rates. NMWC is not intending to apply additional overhead charges for work performed.

The Project Management task budgets for the effort allotted to managing the completion of tasks, subconsultant and agency coordination, compliance with reporting requirements, processing of funding requirements, compliance with standard terms and conditions, and the associated direct costs.

### **2. Cost-Sharing.**

NMWC began studies of the project in 1993, and funded all work on the project through 1999. A total of \$450,000 in funding was provided by CALFED and CVPIA for the previous phase of the project. This Phase I and II funding was allotted for work in 1999 and 2000. NMWC is now seeking \$950,000 from CALFED for a fifty percent (50%) cost share of Phase III work in 2001. In conjunction with this request, NMWC will be requesting Federal Funding for the remaining Phase III cost share.

Without full funding support for the project subject to the approval of the Board of Directors, NMWC may be able to continue some limited work on the final, but at a much reduced level of effort. The project schedule will be moved back indefinitely based upon the level of effort NMWC can afford to fund.

## G. Local Involvement

This project is the single-purpose, or first phase, of a larger, multipurpose project benefitting several communities. Therefore, public outreach efforts, already well underway, must address the interests of company shareholders, as well as a number of specific communities, namely, the City of Sacramento, the County of Sacramento, Landowners within Pleasant Grove – Verona, the County of Sutter, RD1000, and the County of Placer. The member agencies of the Sacramento North Area Groundwater Management Authority (SNAGMA), member agencies of The American River Basin Cooperating Agencies (ARBCA), member agencies of The Sacramento Metropolitan Water Authority (SMWA), the signatures of The Sacramento City/County Office of Metropolitan Water Planning's "*Water Forums*," and the member firms and interests of the Environmental Council of Sacramento (ECOS).

This project has been discussed regionally since 1994, and reviewed publicly and recommended for completion in the "Water Forums Agreement," (April, 2000) which was signed by over fifty (50) local and regional groups, including Federal and State agencies. Virtually ninety-nine percent (99%) of the agencies, organizations, and interest groups listed above are signatures of that agreement.

The NMWC has met and briefed all of those entities above, and is expecting consensus support for the project. In order to formalize and assure local involvement and support, the NMWC will continue its role in the "Water Forums" Successor Effort, SNAGMA as a governing board member, and maintain regular monthly meetings to which all interest groups are invited. A significant environmental interest group not specifically listed above is the City of Sacramento's Habitat Plan Operator, The Natomas Basin Conservancy (NBC), charged with the protection of endangered, threatened and of-concern species within the NMWC service area.

The NMWC been elected by board vote to a position on the NBC Board of Directors to assure continuity and integration of species protection management practices with the operations and maintenance practices of both RD1000's flood control and NMWC's water supply requirements. The NMWC has submitted a Habitat Plan to USFWS for approval and expects to report annually to the NBC on its activities.

## **H. Compliance with Standard Terms and Conditions**

NMWC has reviewed the Standard Terms and Conditions contained in Attachments D and E to the PSP, and will comply with the state and federal standard terms. Through previous funding agreements, NMWC is familiar with both the application of state and federal standard clauses and has the ability to implement them. The proposal submittal requirements, as requested in the PSP, are attached to this proposal.

## **I. Literature Cited**

CALFED Bay-Delta Program. 2000. Ecosystem Restoration Projects and Programs, 2001. Proposal Solicitation Package

U.S. Fish and Wildlife Service June 1999. Six-Year Plan and Budget for Implementing the Central Valley Project Improvement Act, Fiscal Years 1999 - 2004

Hanson, C.H. 1996 (Attached)

U.S. Fish and Wildlife Service. May 1997. Revised Draft Restoration Plan for the AFRP

## **J. Threshold Requirements**

The requested Letters of Notification, Environmental Compliance Check List, Land Use Checklist, and Contract Forms are attached to this proposal.



## Appendix A

### Existing Project Status

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**Project Description.** Natomas Mutual Water Company (NMWC) is a non-profit mutual water company that controls surface water rights for over 250 landowners within the 55,000 acres known as the American Basin. As part of its irrigation system, NMWC operates five (5) unscreened diversions, with a total capacity of about 630 cfs. In addition, during some dry years, NMWC installs a dam at the mouth of the Natomas Cross Canal and installs diesel lift pumps to draw water from the Sacramento River into the Natomas Cross Canal. A map of NMWC's existing facilities is included as Figure 2, attached. The goal of the American Basin Fish Screen and Habitat Improvement Project is to remove all facilities from the Natomas Cross Canal and consolidate the diversions on the Sacramento River to the extent possible. To accomplish the consolidation, some modifications will be required to the internal irrigation and drainage systems.

NMWC began the planning effort for this project in 1993. Initial studies by NMWC looked at operational changes, the use of alternative type barriers, and the relocation or consolidation of diversions. As a result of this initial planning, NMWC has proposed a project to remove a diversion dam and pumps from the Natomas Cross Canal, consolidate their five diversions to one or two facilities located on the Sacramento River, and provide positive barrier fish screens on the consolidated Sacramento River diversion(s).

NMWC has been coordinating the proposed project with local interest groups, resource and regulatory agencies, and funding agencies for over five (5) years. The project has been complicated by proposals from resource and local agencies which could effect the scope of the project. The Department of Water Resources (DWR) is proposing a conjunctive use project for the American Basin, which centered on operational changes in NMWC's service area. The Placer County Water Agency and City of Sacramento are studying the relocation of some American River diversions to the Sacramento River, by use of a combined diversion with NMWC. NMWC will coordinate the project with these entities, but intends to move forward with the design of facilities to meet their present needs.

**Scientific Merit.** The proposed project will remove a mitigation barrier, remove all diversion facilities from the Cross Canal, consolidate diversion locations, provide positive barrier fish screens, and assist in restoration of aquatic, riverine, and riparian habitat. Entrainment caused by unscreened diversions, blockage of suitable habitat, lack of quality stream channel and riparian habitats, and excessive predation has been identified as key stressors affecting anadromous fish species in this area. The project attempts to protect anadromous fish species by addressing NMWC's potential impact upon these stressors, and to assure a stable water supply to upland habitat considered critical to other at-risk species such as the giant garter snake and the Swainson's hawk.

**Current Status of the Project.** The NMWC is nearing completion of the previously funded Feasibility Study and is on schedule to complete the second phase of the project, Preliminary Design and Environmental Documentation, by the end of 2000. The current project schedule is attached to the proposal.

The goal of the Feasibility Study is to identify diversion consolidation alternatives which are practical, maintain the current level of service, minimize environmental impacts, and maximize restoration efforts. Seven (7) viable alternatives for consolidating diversions have been identified and conceptual cost estimates for each are nearly complete. Existing data available for use in designing facilities (i.e., COE GIS mapping of Sacramento River) has been compiled. Flow information has been compiled and analyzed to develop design parameters for layout and sizing of diversions. A schedule of demands has been developed for sizing of the consolidated diversions and associated distribution facilities. The existing distribution system model has been modified to evaluate service from each alternative. The alternatives have been presented to AFSP Technical Team, to obtain their input into the feasibility work.

In conjunction with the feasibility study, an initial biological assessment of the alternatives is being performed. Initial site visits were performed with terrestrial and fisheries biologist to select and define the project alternatives. Available information on special species status has been compiled. Field surveys have been performed to identify critical habitat, potential impacts upon at-risk species, and to characterize the habitat which may be affected by each project alternative. No unexpected impacts have been identified.

Preparation of the feasibility study and biological resource reports have begun. The project is on schedule and selection of an alternative by the end of June 2000, is expected. Once an alternative is selected, work will begin on preparation of the Preliminary Design and Environmental Assessment/Initial Study. This project phase has also been funded by CALFED/CVPPIA.

The project is on budget and with the exception of future funding needs, no outstanding regulatory or implementation issues have been identified.

**Summary of Data Collection and Monitoring.** The summary of data collection is included under project status report. The monitoring at this phase consists of coordination with AFSP Technical Team and responsible agencies. The alternatives have been presented in AFSP Technical Team and their input has been used in conducting the feasibility work.

## Threshold Requirements



Natomas  
Mutual Water Company

2601 West Elkhorn  
Boulevard  
Rio Linda  
CA 95673  
916 419 5936  
FAX 419 8691  
Email NatomasH2O  
@aol.com

May 15, 2000

Mr. Gary Stonehouse  
Planning Division  
City of Sacramento  
1231 I Street, Room 300  
Sacramento, CA 95814

Dear Mr. Stonehouse:

Enclosed within you will find a copy of our proposal to CALFED to secure funding for Final Design and Permitting work on the American Basin Fish Screen & Habitat Improvement Project. A copy of this proposal is being provided as prior notification of a proposed project which may be within your sphere of influence.

Should you have any questions regarding the American Basin Fish Screen & Habitat Improvement Project and how it may effect land use under the jurisdiction of the City Planning Division, please feel free to contact me.

Sincerely,  
NATOMAS MUTUAL WATER COMPANY

Peter J. Hughes  
General Manager

PJH:rn  
PROPOSALCALFED.DOC

Enclosure



Natomas  
Mutual Water Company

2601 West Elkhorn  
Boulevard  
Rio Linda  
CA 95673  
916 419 5936  
FAX 419 8691  
Email NatomasH2O  
@aol.com

May 15, 2000


Ms. Valerie Burrowes  
City Clerk  
City of Sacramento  
915 I Street, Room 304  
Sacramento, CA 95814

Dear Ms. Burrowes:

Enclosed within you will find a copy of our proposal to CALFED to secure funding for Final Design and Permitting work on the American Basin Fish Screen & Habitat Improvement Project. A copy of this proposal is being provided as prior notification of a proposed project which may be within your sphere of influence.

Should you have any questions regarding the American Basin Fish Screen & Habitat Improvement Project and how it may effect land use under the jurisdiction of the City Clerk's office, please feel free to contact me.

Sincerely,  
NATOMAS MUTUAL WATER COMPANY

  
Peter J. Hughes  
General Manager

PJH:rn  
PROPOSALCALFED.DOC

Enclosure



Natomas  
Mutual Water Company

2601 West Elkhorn  
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Rio Linda  
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@aol.com

May 15, 2000

Mr. Jim Sequeira  
Utilities Department  
City of Sacramento  
1395 35<sup>th</sup> Ave  
Sacramento, CA 95822

Dear Mr. Sequeira:

Enclosed within you will find a copy of our proposal to CALFED to secure funding for Final Design and Permitting work on the American Basin Fish Screen & Habitat Improvement Project. A copy of this proposal is being provided as prior notification of a proposed project which may be within your sphere of influence.

Should you have any questions regarding the American Basin Fish Screen & Habitat Improvement Project and how it may effect land use under the jurisdiction of the City Utilities Department, please feel free to contact me.

Sincerely,  
NATOMAS MUTUAL WATER COMPANY

Peter J. Hughes  
General Manager

PJH:m  
PROPOSALCALFED.DOC

Enclosure



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May 15, 2000

Mr. George Musallam  
Public Works Department  
Sutter County  
1160 Civic Center Boulevard, Suite D  
Yuba City, CA 95993

Dear Mr. Musallam:

Enclosed within you will find a copy of our proposal to CALFED to secure funding for Final Design and Permitting work on the American Basin Fish Screen & Habitat Improvement Project. A copy of this proposal is being provided as prior notification of a proposed project which may be within your sphere of influence.

Should you have any questions regarding the American Basin Fish Screen & Habitat Improvement Project and how it may effect land use under the jurisdiction of the Sutter County Public Works Department, please feel free to contact me.

Sincerely,  
NATOMAS MUTUAL WATER COMPANY

  
Peter J. Hughes  
General Manager

PJH:m  
PROPOSALCALFED.DOC

Enclosure



Natomas  
Mutual Water Company

2601 West Elkhorn  
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@aol.com

May 15, 2000

Mr. Thomas Hutchins  
Neighborhood Planning and Community Development  
Sacramento County  
827 7<sup>th</sup> Street, Room 230  
Sacramento, CA 95814

Dear Mr. Hutchins:

Enclosed within you will find a copy of our proposal to CALFED to secure funding for Final Design and Permitting work on the American Basin Fish Screen & Habitat Improvement Project. A copy of this proposal is being provided as prior notification of a proposed project which may be within your sphere of influence.

Should you have any questions regarding the American Basin Fish Screen & Habitat Improvement Project and how it may effect land use under the jurisdiction of the Neighborhood Planning and Community Development Department, please feel free to contact me.

Sincerely,  
NATOMAS MUTUAL WATER COMPANY

  
Peter J. Hughes  
General Manager

PJH:m  
PROPOSALCALFED.DOC

Enclosure





Natomas  
Mutual Water Company

2601 West Elkhorn  
Boulevard  
Rio Linda  
CA 95673  
916 419 5936  
FAX 419 8691  
Email: NatomasH2O  
@aol.com

May 15, 2000


Mr. Jane Sekelsky  
Division of Land Management  
California State Lands Commission  
1807 13<sup>th</sup> Street  
Sacramento, CA 95814

Dear Mr. Sekelsky:

Enclosed within you will find a copy of our proposal to CALFED to secure funding for Final Design and Permitting work on the American Basin Fish Screen & Habitat Improvement Project. A copy of this proposal is being provided as prior notification of a proposed project which may be within your sphere of influence.

Should you have any questions regarding the American Basin Fish Screen & Habitat Improvement Project and how it may effect land use under the jurisdiction of the Division of Land Management, please feel free to contact me.

Sincerely,  
NATOMAS MUTUAL WATER COMPANY

  
Peter J. Hughes  
General Manager

PJH:rn  
PROPOSALCALFED.DOC

Enclosure



Natomas  
Mutual Water Company

2601 West Elkhorn  
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Rio Linda  
CA 95673  
916 419 5936  
FAX 419 8691  
Email NatomasH2O  
@aol.com

May 15, 2000

Mr. Jim Clifton  
Reclamation District 1000  
1633 Garden Hwy  
Sacramento, CA 95833 ,

Dear Mr. Clifton:

Enclosed within you will find a copy of our proposal to CALFED to secure funding for Final Design and Permitting work on the American Basin Fish Screen & Habitat Improvement Project. A copy of this proposal is being provided as prior notification of a proposed project which may be within your sphere of influence.

Should you have any questions regarding the American Basin Fish Screen & Habitat Improvement Project and how it may effect land use under the jurisdiction of the Reclamation District 1000, please feel free to contact me.

Sincerely,  
NATOMAS MUTUAL WATER COMPANY

Peter J. Hughes  
General Manager

PJH:m  
PROPOSALCALFED.DOC

Enclosure



Natomas  
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@aol.com

May 15, 2000

Mr. Einar Maisch  
Director of Planning and Marketing  
Placer County Water Agency  
P.O. Box 6570  
Auburn, CA 95604

Dear Mr. Maisch: *Einar*

Enclosed within you will find a copy of our proposal to CALFED to secure funding for Final Design and Permitting work on the American Basin Fish Screen & Habitat Improvement Project. A copy of this proposal is being provided as prior notification of a proposed project which may be within your sphere of influence.

Should you have any questions regarding the American Basin Fish Screen & Habitat Improvement Project and how it may effect land use under the jurisdiction of the Placer County Water Agency, please feel free to contact me.

Sincerely,  
NATOMAS MUTUAL WATER COMPANY

*Peter J. Hughes*  
Peter J. Hughes  
General Manager

PJH:m  
PROPOSALCALFED.DOC

Enclosure

## Environmental Compliance Checklist

All applicants must fill out this Environmental Compliance Checklist. Applications must contain answers to the following questions to be responsive and to be considered for funding. Failure to answer these questions and include them with the application will result in the application being considered nonresponsive and not considered for funding.

1. Do any of the actions included in the proposal require compliance with either the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), or both?

  X    
YES

        
NO

2. If you answered yes to #1, identify the lead governmental agency for CEQA/NEPA compliance.

Reclamation District No. 1000 (CEQA), Bureau of Reclamation (NEPA)  
Lead Agency

3. If you answered no to #1, explain why CEQA/NEPA compliance is not required for the actions in the proposal.

4. If CEQA/NEPA compliance is required, describe how the project will comply with either or both of these laws. Describe where the project is in the compliance process and the expected date of completion.

An initial study/environmental assessment is being drafted as part of the previously funded Phase II of project and a Mitigated Negative Declaration/FONSI or an EIR/EIS will be prepared during Phase III of the project which is currently being proposed for funding.

5. Will the applicant require access across the public or private property that the applicant does not own to accomplish the activities in the proposal.

  X    
YES

        
NO

(See Agreement under Attachments)

If yes, the applicant must attach written permission for access from the relevant property owner(s). Failure to include written permission for access may result in disqualification of the proposal during the review process. Research and monitoring field projects for which specific field locations have not been identified will be required to provide access and needs and permission for access with 30 days of notification of approval.

6. Please indicate what permits or other approvals may be required for the activities contained in your proposal. Check all boxes that apply.

**LOCAL**

Conditional use permit	_____
Variance	_____
Subdivision Map Act approval	_____
Grading permit	_____
General plan amendment	_____
Specific plan approval	_____
Rezone	_____
Williamson Act Contract	_____
cancellation	_____
Other _____	_____
(Please specify)	
None required	<u>  X  </u>

**STATE**

CESA Compliance	<u>  X  </u>	(CDFG)
Streambed alternation permit	<u>  X  </u>	(CDFG)
CWA § 401 certification	<u>  X  </u>	(RWQCB)
Coastal development permit	_____	(Coastal Commission/BCDC)
Reclamation Board approval	<u>  X  </u>	
Notification	_____	(DPC, BCDC)
Other <u>Change in Point of Diversion</u>	<u>  X  </u>	(SWRCB)
(Please specify)		
None required	_____	

**FEDERAL**

ESA Consultation	<u>  X  </u>	(USFWS and NMFS)
Rivers & Harbors Act permit	<u>  X  </u>	(ACOE)
CWA § 404 permit	<u>  X  </u>	(ACOE)
Other _____	_____	
(Please specify)		
None required	_____	

Note: The proposal is for final design and permitting only. Permits will be obtained during this phase, but actual construction activities will not occur until following phase.

DPC = Delta Protection Commission

ESA = Endangered Species Act

CWA = Clean Water Act

CDFG = California Department of Fish and Game

CESA = California Endangered Species Act RWQCB = Regional Water Quality Control Board

USFWS = U.S. Fish and Wildlife Service

BCDC = Bay Conservation and Development Comm.

ACOE = U.S. Army Corps of Engineers

NMFS = National Marine Fisheries Service SWRCB = State Water Resources Control Board

## Land Use Checklist

All applicants must fill out this Land Use Checklist for their proposal. Applications must contain answers to the following questions to be responsive and to be considered for funding. Failure to answers these questions and include them with the application will result in the application being considered nonresponsive and not considered for funding.

1. Do the actions in the proposal involve physical changes to the land (i.e. grading, planting, vegetation, or breeching levees) or restrictions in land use (i.e. conservation easement or placement of land use in wildlife refuge)?

YES   X    
NO

2. If you answered NO to #1, explain what type of actions are involved in the proposal (i.e. research only, planning only).

Final design of fish screen facilities (planning only).

3. If YES to #1, what is the proposed land use change or restriction under the proposal?
4. If YES to #1, is the land currently under a Williamson Act contract?

YES NO

5. If YES to # 1, answer the following:

Current land use \_\_\_\_\_  
Current zoning \_\_\_\_\_  
Current general plan designation \_\_\_\_\_

6. If YES to # 1, is the land classified as Prime Farmland, Farmland of Statewide Importance or Unique Farmland on the Department of Conservation Important Farmland Maps?

YES NO

7. If YES to # 1, how many acres of land will be subject to physical change or land use restrictions under the proposal?

8. If YES to # 1, is the property currently being commercially farmed or grazed?

YES NO

9. If YES to # 8, what are the number of employees/acre \_\_\_\_\_  
the total number of employees \_\_\_\_\_



**NONDISCRIMINATION COMPLIANCE STATEMENT**

STD. 19 (REV. 3-95)

COMPANY NAME

Natomas Mutual Water Company

The company named above (hereinafter referred to as "prospective contractor") hereby certifies, unless specifically exempted, compliance with Government Code Section 12990 (a-f) and California Code of Regulations, Title 2, Division 4, Chapter 5 in matters relating to reporting requirements and the development, implementation and maintenance of a Nondiscrimination Program. Prospective contractor agrees not to unlawfully discriminate, harass or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, physical disability (including HIV and AIDS), medical condition (cancer), age (over 40), marital status, denial of family care leave and denial of pregnancy disability leave.

**CERTIFICATION**

*I, the official named below, hereby swear that I am duly authorized to legally bind the prospective contractor to the above described certification. I am fully aware that this certification, executed on the date and in the county below, is made under penalty of perjury under the laws of the State of California.*

OFFICIAL'S NAME

Peter J. Hughes

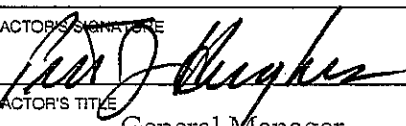
DATE EXECUTED

May 12, 2000

EXECUTED IN THE COUNTY OF

Sacramento

PROSPECTIVE CONTRACTOR'S SIGNATURE



PROSPECTIVE CONTRACTOR'S TITLE

General Manager

PROSPECTIVE CONTRACTOR'S LEGAL BUSINESS NAME

Natomas Mutual Water Company



## NONDISCRIMINATION COMPLIANCE STATEMENT

STD. 19 (REV. 3-95)

COMPANY NAME

Ensign &amp; Buckley Consulting Engineers

The company named above (hereinafter referred to as "prospective contractor") hereby certifies, unless specifically exempted, compliance with Government Code Section 12990 (a-f) and California Code of Regulations, Title 2, Division 4, Chapter 5 in matters relating to reporting requirements and the development, implementation and maintenance of a Nondiscrimination Program. Prospective contractor agrees not to unlawfully discriminate, harass or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, physical disability (including HIV and AIDS), medical condition (cancer), age (over 40), marital status, denial of family care leave and denial of pregnancy disability leave.

## CERTIFICATION

*I, the official named below, hereby swear that I am duly authorized to legally bind the prospective contractor to the above described certification. I am fully aware that this certification, executed on the date and in the county below, is made under penalty of perjury under the laws of the State of California.*

OFFICIAL'S NAME

Ferrel H. Ensign


DATE EXECUTED

May 12, 2000

EXECUTED IN THE COUNTY OF

Sacramento

PROSPECTIVE CONTRACTOR'S SIGNATURE



PROSPECTIVE CONTRACTOR'S TITLE

Partner

PROSPECTIVE CONTRACTOR'S LEGAL BUSINESS NAME

Ensign &amp; Buckley Consulting Engineers

## NONDISCRIMINATION COMPLIANCE STATEMENT

STD. 19 (REV. 3-95)

COMPANY NAME

Miriam Green Associates

The company named above (hereinafter referred to as "prospective contractor") hereby certifies, unless specifically exempted, compliance with Government Code Section 12990 (a-f) and California Code of Regulations, Title 2, Division 4, Chapter 5 in matters relating to reporting requirements and the development, implementation and maintenance of a Nondiscrimination Program. Prospective contractor agrees not to unlawfully discriminate, harass or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, physical disability (including HIV and AIDS), medical condition (cancer), age (over 40), marital status, denial of family care leave and denial of pregnancy disability leave.

## CERTIFICATION

*I, the official named below, hereby swear that I am duly authorized to legally bind the prospective contractor to the above described certification. I am fully aware that this certification, executed on the date and in the county below, is made under penalty of perjury under the laws of the State of California.*

OFFICIAL'S NAME

Miriam Green

DATE EXECUTED

May 12, 2000

EXECUTED IN THE COUNTY OF

Sacramento

PROSPECTIVE CONTRACTOR'S SIGNATURE



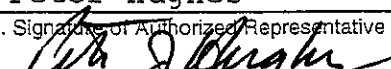
PROSPECTIVE CONTRACTOR'S TITLE

Owner

PROSPECTIVE CONTRACTOR'S LEGAL BUSINESS NAME

Miriam Green Associates

# APPLICATION FOR FEDERAL ASSISTANCE

<b>1. TYPE OF SUBMISSION:</b> Application <input type="checkbox"/> Construction <input checked="" type="checkbox"/> Non-Construction Preapplication <input type="checkbox"/> Construction <input type="checkbox"/> Non-Construction		<b>2. DATE SUBMITTED</b> May 15, 2000		Applicant Identifier	
		<b>3. DATE RECEIVED BY STATE</b>		State Application Identifier	
		<b>4. DATE RECEIVED BY FEDERAL AGENCY</b>		Federal Identifier	
<b>5. APPLICANT INFORMATION</b>					
<b>Legal Name:</b> Natomas Central Mutual Water Company (NCMWC)			<b>Organizational Unit:</b> Peter Hughes (916) 419-5936		
<b>Address (give city, county, State, and zip code):</b> 2601 W. Elkhorn Boulevard Rio Linda, California 95673			<b>Name and telephone number of person to be contacted on matters involving this application (give area code)</b>		
<b>6. EMPLOYER IDENTIFICATION NUMBER (EIN):</b> 94-0708995			<b>7. TYPE OF APPLICANT: (enter appropriate letter in box)</b> <div style="display: flex; justify-content: space-between;"> <div>           A. State            B. County            C. Municipal            D. Township            E. Interstate            F. Intermunicipal            G. Special District         </div> <div>           H. Independent School Dist.            I. State Controlled Institution of Higher Learning            J. Private University            K. Indian Tribe            L. Individual            M. Profit Organization            N. Other (Specify) <u>Non-Profit Organization</u> </div> </div> <div style="text-align: right; margin-top: -20px;"> <input checked="" type="checkbox"/> N         </div>		
<b>8. TYPE OF APPLICATION:</b> <div style="display: flex; justify-content: space-around;"> <input checked="" type="checkbox"/> New           <input type="checkbox"/> Continuation           <input type="checkbox"/> Revision         </div> If Revision, enter appropriate letter(s) in box(es) <input type="checkbox"/> <input type="checkbox"/> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div>           A. Increase Award            D. Decrease Duration         </div> <div>           B. Decrease Award            Other(specify):         </div> <div>           C. Increase Duration         </div> </div>			<b>9. NAME OF FEDERAL AGENCY:</b> Bureau of Reclamation - CVPIA		
<b>10. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER:</b> <div style="text-align: center;"> <input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/> <input type="text"/> </div> <b>TITLE:</b> N/A			<b>11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT:</b> American Basin Fish Screen and Habitat Improvement Project		
<b>12. AREAS AFFECTED BY PROJECT (Cities, Counties, States, etc.):</b> Sutter County, Sacramento County, Sacramento City			<b>13. PROPOSED PROJECT</b>		
<b>14. CONGRESSIONAL DISTRICTS OF:</b> 2, 3, 4, and 5 California		<b>15. ESTIMATED FUNDING:</b>			
<b>Start Date</b> 11-24-00	<b>Ending Date</b> 8-30-01	<b>a. Applicant</b> NCMWC		<b>b. Project</b> Fish Screen	
<b>16. IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS?</b>		<b>a. YES. THIS PREAPPLICATION/APPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW ON:</b> DATE _____			
<b>17. IS THE APPLICANT DELINQUENT ON ANY FEDERAL DEBT?</b>		<b>b. No.</b> <input type="checkbox"/> PROGRAM IS NOT COVERED BY E. O. 12372 <input type="checkbox"/> OR PROGRAM HAS NOT BEEN SELECTED BY STATE FOR REVIEW			
<b>18. TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL DATA IN THIS APPLICATION/PREAPPLICATION ARE TRUE AND CORRECT, THE DOCUMENT HAS BEEN DULY AUTHORIZED BY THE GOVERNING BODY OF THE APPLICANT AND THE APPLICANT WILL COMPLY WITH THE ATTACHED ASSURANCES IF THE ASSISTANCE IS AWARDED.</b>		<b>19. SIGNATURE OF AUTHORIZED REPRESENTATIVE</b>			
<b>a. Type Name of Authorized Representative</b> Peter Hughes		<b>b. Title</b> General Manager		<b>c. Telephone Number</b> (916) 419-5936	
<b>d. Signature of Authorized Representative</b> 		<b>e. Date Signed</b> May 15, 2000		<b>f. Estimated Funding Summary:</b>	
<b>a. Federal</b> CVPIA		<b>b. Applicant</b>		<b>c. State</b> CALFED	
<b>d. Local</b>		<b>e. Other</b>		<b>f. Program Income</b>	
<b>g. TOTAL</b>		<b>1,900,000</b>			

## BUDGET INFORMATION - Non-Construction Programs

## SECTION A - BUDGET SUMMARY

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. Geotechnical/Surveying		\$	\$	\$ 205,000	\$ 205,000	\$ 410,000
2. Final Design				617,500	617,500	1,235,000
3. Permitting				80,000	80,000	160,000
4. Project Management				47,500	47,500	95,000
5. Totals		\$	\$	\$ 950,000	\$ 950,000	\$ 1,900,000

## SECTION B - BUDGET CATEGORIES

Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY				Total (5)
	(1) Geotech/Surv	(2) Final Design	(3) Permitting	(4) Proj. Mngt	
a. Personnel	\$	\$	\$	\$	\$
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies					
f. Contractual	410,000	1,235,000	160,000	95,000	1,900,000
g. Construction					
h. Other					
i. Total Direct Charges (sum of 6a-6h)					
j. Indirect Charges					
k. TOTALS (sum of 6i and 6j)	\$ 410,000	\$ 1,235,000	\$ 160,000	\$ 95,000	\$ 1,900,000
7. Program Income	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0

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SECTION C - NON-FEDERAL RESOURCES					
(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) TOTALS	
8. Geotechnical / Surveying	\$	\$ 205,000	\$	\$ 205,000	
9. Final Design		617,500		617,500	
10. Permitting		80,000		80,000	
11. Project Management		47,500		47,500	
12. TOTAL (sum of lines 8-11)	\$	\$ 950,000	\$	\$ 950,000	

SECTION D - FORECASTED CASH NEEDS					
	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
		13. Federal	\$ 950,000	\$ 350,000	\$ 300,000
14. Non-Federal	950,000	350,000	300,000	300,000	---
15. TOTAL (sum of lines 13 and 14)	\$ 1,900,000	\$ 700,000	\$ 600,000	\$ 600,000	\$ ---

SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT				
(a) Grant Program	FUTURE FUNDING PERIODS (Years)			
	(b) First	(c) Second	(d) Third	(e) Fourth
16. Phase III - Final Design and Permitting	\$ 950,000	\$ ---	\$ ---	\$ ---
17. Phase IV - Construction	950,000	3,500,000	3,500,000	---
18. Phase V - Screen Evaluation				60,000
19.				
20. TOTAL (sum of lines 16-19)	\$1,950,000	\$ 3,500,000	\$ 3,500,000	\$ 60,000

SECTION F - OTHER BUDGET INFORMATION	
21. Direct Charges:	22. Indirect Charges:
23. Remarks:	

## ASSURANCES - NON-CONSTRUCTION PROGRAMS

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0040), Washington, DC 20503.

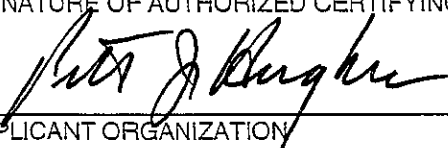
**PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.**

**NOTE:** Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the awarding agency. Further, certain Federal awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant, I certify that the applicant:

1. Has the legal authority to apply for Federal assistance and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project cost) to ensure proper planning, management and completion of the project described in this application.
2. Will give the awarding agency, the Comptroller General of the United States and, if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
3. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
4. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
5. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
6. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. §§6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§290 dd-3 and 290 ee 3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and, (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.
7. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
8. Will comply, as applicable, with provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

9. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333), regarding labor standards for federally-assisted construction subagreements.
10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
11. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).
12. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
13. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et seq.).
14. Will comply with P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.
15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. §§2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.
16. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.
17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."
18. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing this program.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL 		TITLE General Manager
APPLICANT ORGANIZATION Natomas Mutual Water Company		DATE SUBMITTED May 15, 2000

**Certifications Regarding Debarment, Suspension and  
Other Responsibility Matters, Drug-Free Workplace  
Requirements and Lobbying**

\*Persons signing this form should refer to the regulations referenced below for complete instructions:

Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions - The prospective primary participant further agrees by submitting this proposal that it will include the clause titled, "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions. See below for language to be used; use this form for certification and sign; or use Department of the Interior Form 1954 (DI-1954). (See Appendix A of Subpart D of 43 CFR Part 12.)

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions - (See Appendix B of Subpart D of 43 CFR Part 12.)

Certification Regarding Drug-Free Workplace Requirements - Alternate I. (Grantees Other Than Individuals) and Alternate II. (Grantees Who are Individuals) - (See Appendix C of Subpart D of 43 CFR Part 12.)

Signature on this form provides for compliance with certification requirements under 43 CFR Parts 12 and 18. The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Department of the Interior determines to award the covered transaction, grant, cooperative agreement or loan.

**PART A: Certification Regarding Debarment, Suspension, and Other Responsibility Matters -  
Primary Covered Transactions**

*CHECK ☐ IF THIS CERTIFICATION IS FOR A PRIMARY COVERED TRANSACTION AND IS APPLICABLE.*

- (1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
  - (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
  - (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
  - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
  - (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- (2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

**PART B: Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion -  
Lower Tier Covered Transactions**

*CHECK ☐ IF THIS CERTIFICATION IS FOR A LOWER TIER COVERED TRANSACTION AND IS APPLICABLE.*

- (1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- (2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

DI-2010  
March 1995  
(This form consolidates DI-1953, DI-1954,  
DI-1955, DI-1956 and DI-1983)



**PART C: Certification Regarding Drug-Free Workplace Requirements**

*CHECK X IF THIS CERTIFICATION IS FOR AN APPLICANT WHO IS NOT AN INDIVIDUAL.*

**Alternate I. (Grantees Other Than Individuals)**

- A. The grantee certifies that it will or continue to provide a drug-free workplace by:
- (a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
  - (b) Establishing an ongoing drug-free awareness program to inform employees about--
    - (1) The dangers of drug abuse in the workplace;
    - (2) The grantee's policy of maintaining a drug-free workplace;
    - (3) Any available drug counseling, rehabilitation, and employee assistance programs; and
    - (4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
  - (c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);
  - (d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will --
    - (1) Abide by the terms of the statement; and
    - (2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction;
  - (e) Notifying the agency in writing, within ten calendar days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to every grant officer on whose grant activity the convicted employee was working, unless the Federal agency has designated a central point for the receipt of such notices. Notice shall include the identification number(s) of each affected grant;
  - (f) Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted --
    - (1) Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or
    - (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency;
  - (g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a), (b), (c), (d), (e) and (f).

B. The grantee may insert in the space provided below the site(s) for the performance of work done in connection with the specific grant:

Place of Performance (Street address, city, county, state, zip code)

---

---

---

Check    if there are workplaces on file that are not identified here.

**PART D: Certification Regarding Drug-Free Workplace Requirements**

*CHECK X IF THIS CERTIFICATION IS FOR AN APPLICANT WHO IS AN INDIVIDUAL.*

**Alternate II. (Grantees Who Are Individuals)**

- (a) The grantee certifies that, as a condition of the grant, he or she will not engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance in conducting any activity with the grant;
- (b) If convicted of a criminal drug offense resulting from a violation occurring during the conduct of any grant activity, he or she will report the conviction, in writing, within 10 calendar days of the conviction, to the grant officer or other designee, unless the Federal agency designates a central point for the receipt of such notices. When notice is made to such a central point, it shall include the identification number(s) of each affected grant.

DI-2010  
March 1995  
(This form consolidates DI-1953, DI-1954,  
DI-1955, DI-1956 and DI-1963)

PART E: Certification Regarding Lobbying  
Certification for Contracts, Grants, Loans, and Cooperative Agreements

CHECK ☒ IF CERTIFICATION IS FOR THE AWARD OF ANY OF THE FOLLOWING AND  
THE AMOUNT EXCEEDS \$100,000: A FEDERAL GRANT OR COOPERATIVE AGREEMENT,  
SUBCONTRACT, OR SUBGRANT UNDER THE GRANT OR COOPERATIVE AGREEMENT.

CHECK ☐ IF CERTIFICATION IS FOR THE AWARD OF A FEDERAL  
LOAN EXCEEDING THE AMOUNT OF \$150,000, OR A SUBGRANT OR  
SUBCONTRACT EXCEEDING \$100,000, UNDER THE LOAN.

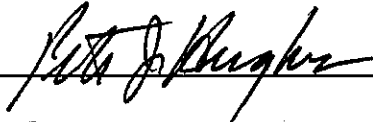
The undersigned certifies, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, and officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

As the authorized certifying official, I hereby certify that the above specified certifications are true.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL



TYPED NAME AND TITLE Peter Hughes, General Manager

DATE May 15, 2000

# Figures and Tables

## Figures

Figure 1. Vicinity Map

Figure 2. Existing Facilities

Figure 3. Proposed Facilities

Figure 4. Proposed Organizational Chart for the Evaluation,  
Design, & Construction of Fish Screens

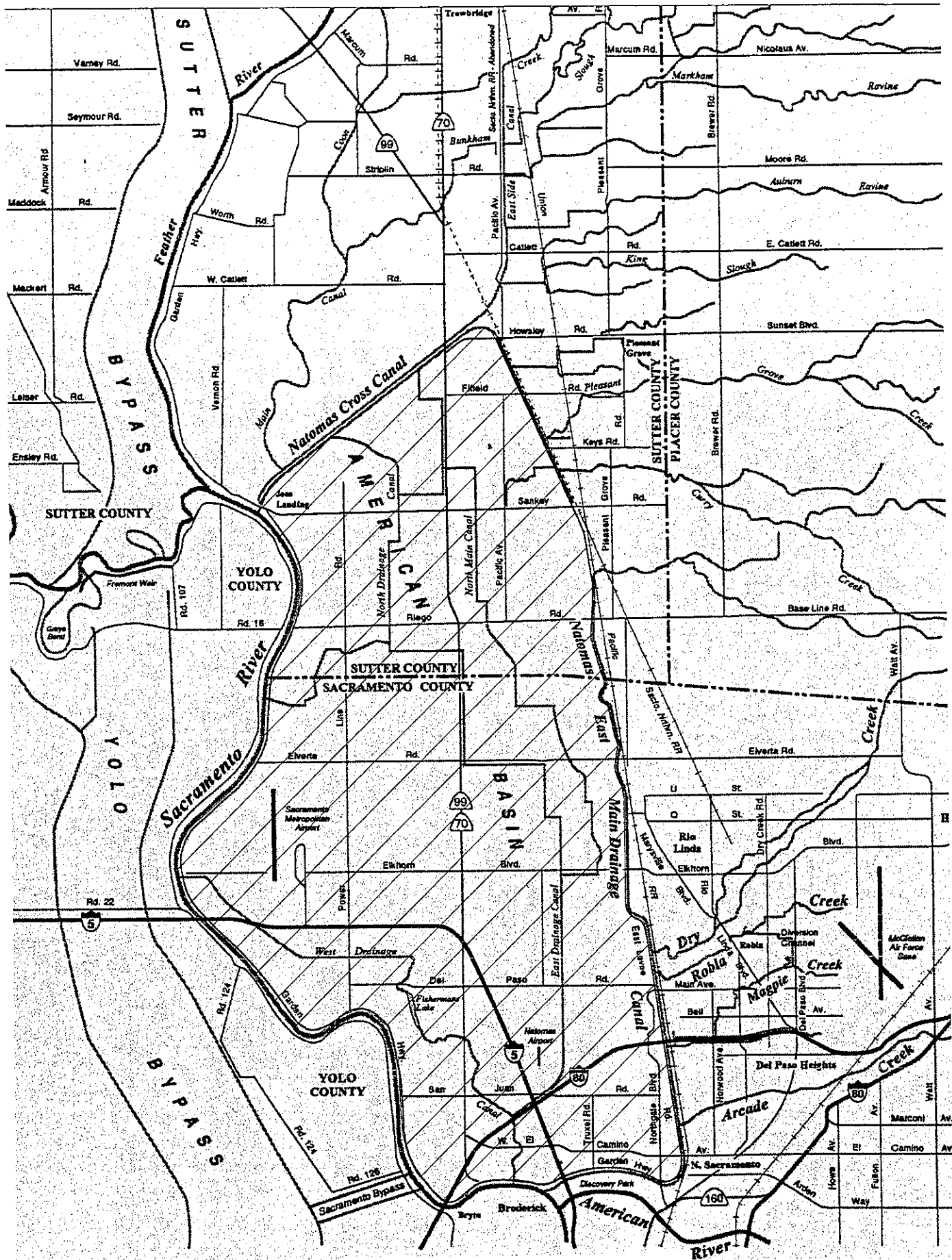
Figure 5. American Basin Fish Screen & Habitat  
Improvement Project – Project Schedule

## Tables

Table 1. Total Project Budget

Table 2 Estimated Budget and Scope of Work

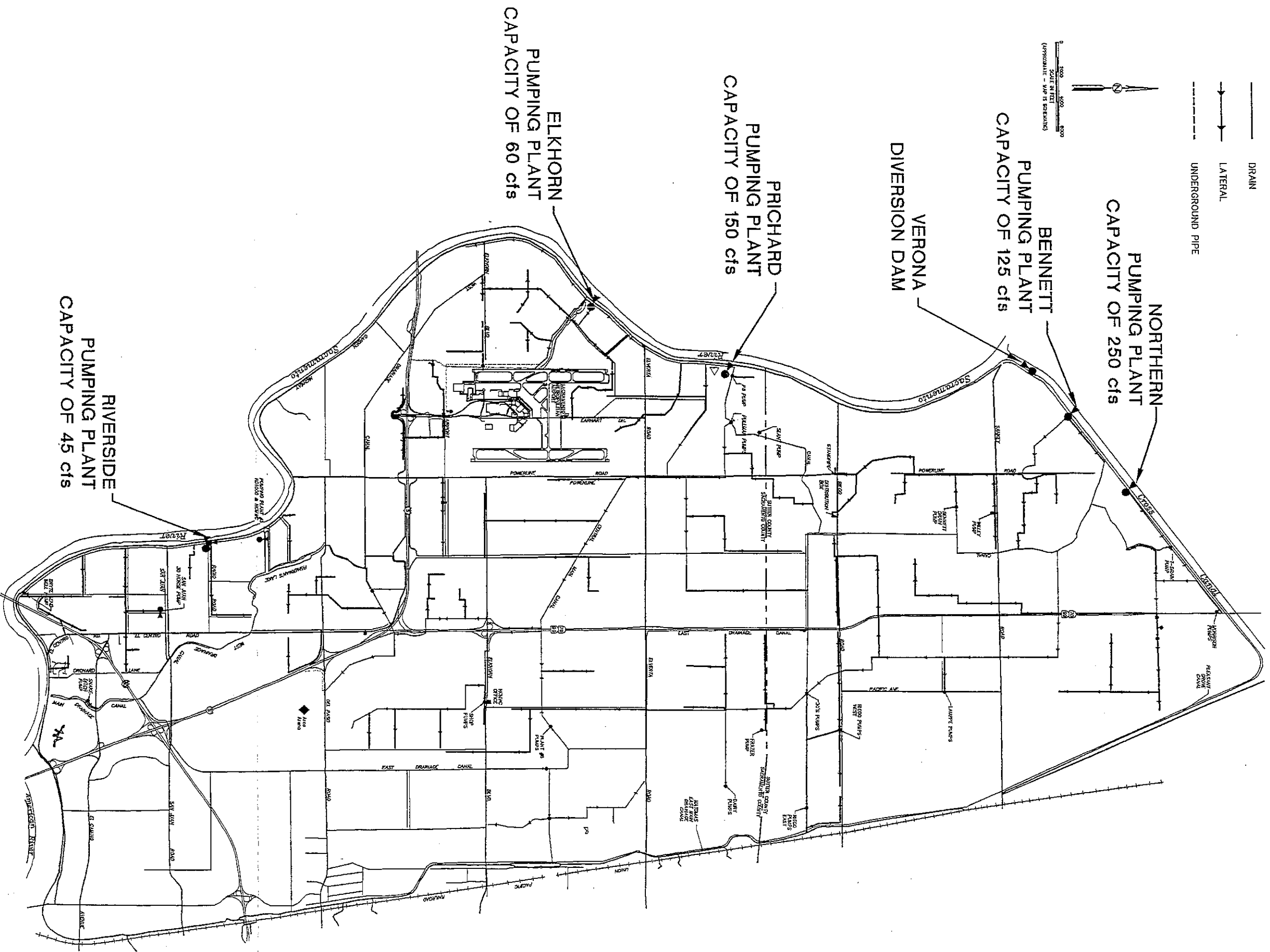
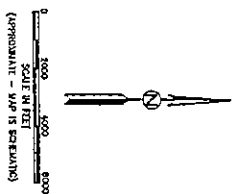
Table 3. Phase III Budget Breakdown



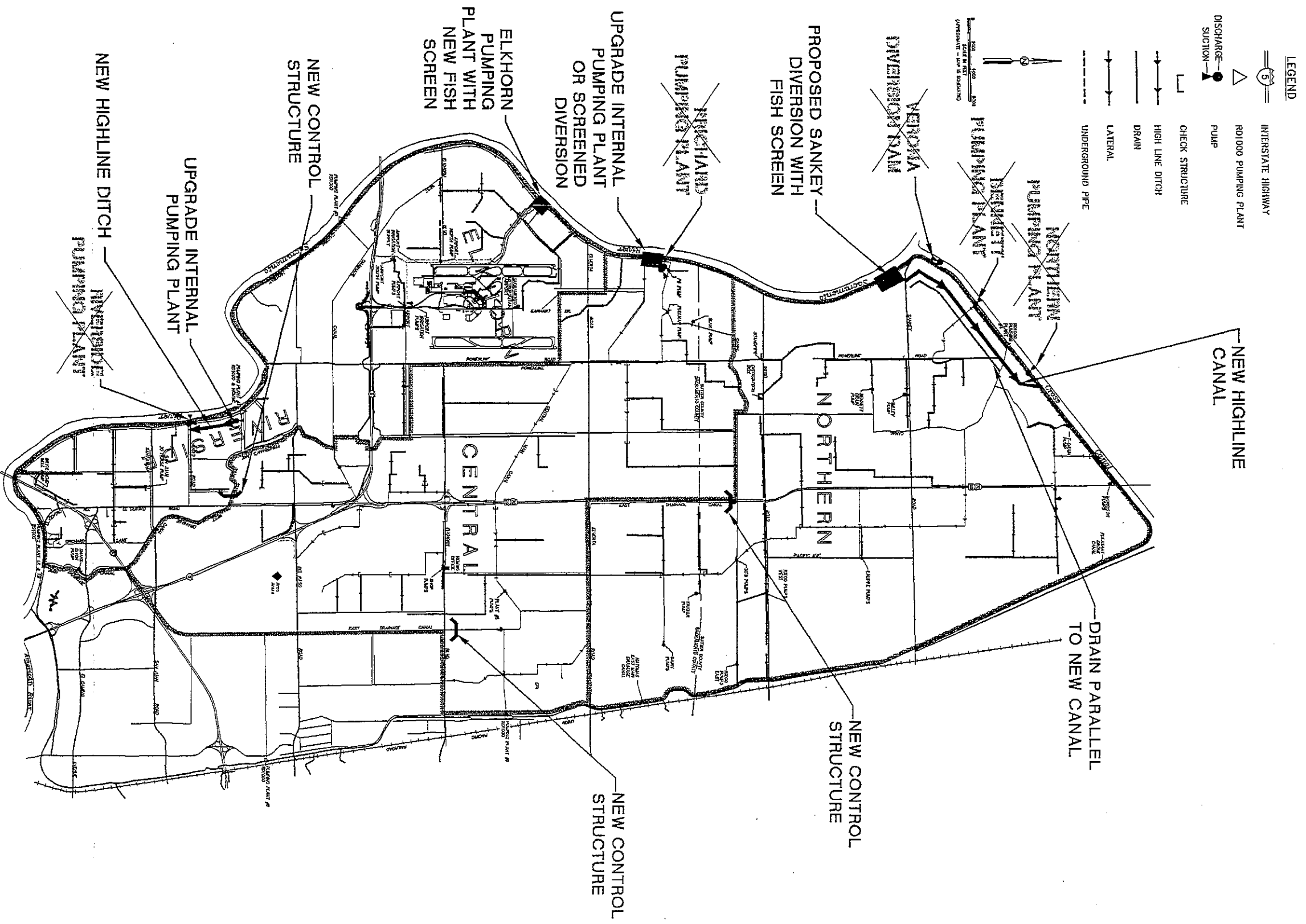
NATOMAS MUTUAL WATER COMPANY

FIGURE 1

- LEGEND**
- INTERSTATE HIGHWAY
  - RD1000 PUMPING PLANT
  - PUMP
  - DISCHARGE
  - SUCTION
  - CHECK STRUCTURE
  - HIGH LINE DITCH
  - DRAIN
  - LATERAL
  - UNDERGROUND PIPE



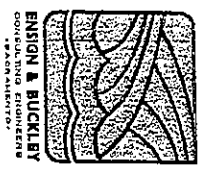
MAY 6, 1998



**LEGEND**

- INTERSTATE HIGHWAY
- RD1000 PUMPING PLANT
- PUMP
- DISCHARGE
- SUCTION
- CHECK STRUCTURE
- HIGH LINE DITCH
- DRAIN
- LATERAL
- UNDERGROUND PIPE

Scale: 1" = 100' (0' 0" to 100' 0")



# PROGRAM ADMINISTRATOR NATOMAS MUTUAL WATER COMPANY

PROJECT MANAGER  
ENSIGN & BUCKLEY  
CONSULTING ENGINEERS

## STATE OF CALIFORNIA

WATER RESOURCES CONTROL BOARD  
-DIVISION OF WATER RIGHTS  
-DEPARTMENT OF FISH & GAME  
-FUNDING  
-STREAMBED ALTERATION AGREEMENT  
-RECLAMATION BOARD  
-ENCROACHMENT PERMIT  
-REGIONAL WATER QUALITY CONTROL BOARD  
-SECTION 401  
-DEPARTMENT OF WATER RESOURCES  
-CONJUNCTIVE USE  
-CALFED  
-FUNDING  
-LANDS COMMISSION  
-USE OF LAND OWNED BY STATE

## REGIONAL & LOCAL

RECLAMATION DISTRICT 1000  
RECLAMATION DISTRICT 1004  
PLEASANT GROVE VERONA IRRIGATION DISTRICT  
CITY OF SACRAMENTO  
COUNTY OF SACRAMENTO  
COUNTY OF SUTTER  
COUNTY OF PLACER  
NORTHERN CALIFORNIA WATER ASSOCIATION

## TECHNICAL ADVISORY COMMITTEE

U.S. BUREAU OF RECLAMATION  
NATIONAL MARINE FISHERIES SERVICE  
U.S. FISH & WILDLIFE SERVICE  
CALIFORNIA DEPARTMENT OF FISH & GAME  
CALIFORNIA DEPARTMENT OF WATER RESOURCES  
ET AL.

## FEDERAL AGENCIES

U.S. BUREAU OF RECLAMATION  
-FUNDING  
-WATER PURCHASE AGREEMENT  
U.S. ARMY CORPS OF ENGINEERS  
-SECTION 10 & SECTION 404  
U.S. FISH & WILDLIFE SERVICE  
-SECTION 7 CONSULTATION  
NATIONAL MARINE FISHERIES SERVICE  
-SECTION 7 CONSULTATION

LEGAL ADVISOR AND  
FUNDING COORDINATION  
DOWNEY, BRAND,  
SEYMOUR & ROHWER

WATER RIGHTS  
MURRAY, BURNS  
& KIENLEN

FINANCIAL ADVISOR  
ROBERT K GARRETT,  
CPA MS TAX

ELECTRICAL ENGINEERING  
WAVE ENGINEERS, INC

GEOPHYSICAL  
KLEINFELDER, INC.  
RAY COSTA

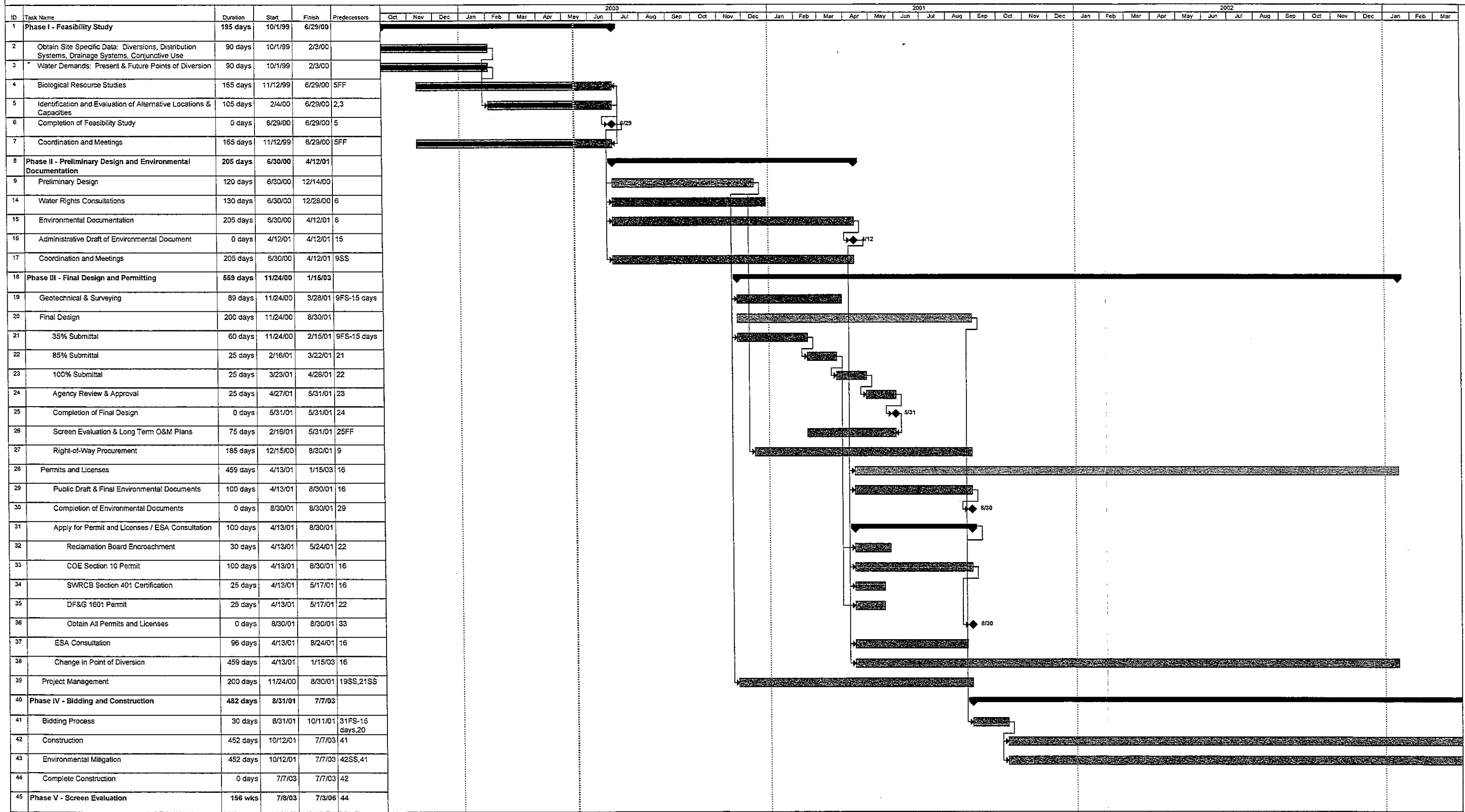
SURVEYING & MAPPING  
KAST CONSULTING ENGINEERS, INC.

ENVIRONMENTAL TEAM  
TEAM LEADER: MIRIAM GREEN ASSOC. (MGA)  
ENVIRONMENTAL DOCUMENTATION & PERMITTING: MGA  
BIOLOGICAL STUDIES & ENDANGERED SPECIES: MGA  
FISHERIES: HANSON ENVIRONMENTAL, INC.

NATOMAS MUTUAL WATER COMPANY  
PROPOSED ORGANIZATIONAL  
CHART FOR THE  
EVALUATION, DESIGN & CONSTRUCTION  
OF FISH SCREENS

**Natomas Mutual Water Company**  
**American Basin Fish Screen & Habitat Improvement Project**  
**Project Schedule**  
**Updated: May 5, 2000**

**Figure 5**



Client: Natomas Mutual Water Company  
 Printed on: 5/15/00  
 Prepared by: Ensign and Buckley

Task		Progress		Summary		Rolled Up Split		Rolled Up Progress		Project Summary	
Split		Milestone		Rolled Up Task		Rolled Up Milestone		External Tasks			



TABLE NO 1

**Natomas Mutual Water Company**  
**American Basin Fish Screen and Habitat Improvement Project**

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## ESTIMATED BUDGET AND SCOPE OF WORK

TABLE NO 2

NATOMAS MUTUAL WATER COMPANY  
AMERICAN BASIN FISH SCREEN AND HABITAT IMPROVEMENT PROJECT

TASK DESCRIPTION		PROJECT COSTS (\$)	PROPOSED CVPIA FUNDING (\$)	PROPOSED CALFED FUNDING (\$)
<b><u>Phase I - Feasibility Study</u></b>				
Task No 1.1	Obtain Site Specific Data	40,000	15,000	25,000
Task No 1.2	Evaluation of Alternatives	60,000	30,000	30,000
Task No 1.3	Biological Resource Studies	35,000	0	35,000
Task No 1.4	Water Demand Investigations	10,000	10,000	0
Task No 1.5	Coordination and Meetings	15,000	15,000	0
Task No 1.6	Legal and Administration	10,000	10,000	0
Total Estimated Phase I Costs:		170,000	80,000	90,000
<b><u>Phase II - Preliminary Design and Environmental Documentation</u></b>				
Task No 2.1	Preliminary Design	105,000	52,500	52,500
Task No 2.2	Environmental Documentation	115,000	57,500	57,500
Task No 2.3	Water Rights Consultations	25,000	25,000	0
Task No 2.4	Coordination and Meetings	15,000	15,000	0
Task No 2.5	Legal and Administration	20,000	20,000	0
Total Estimated Phase II Costs:		280,000	170,000	110,000
<b><u>Phase III - Final Design</u></b>				
Task No 3.1	Geotechnical and Surveying	410,000	205,000	205,000
Task No 3.2	Final Design	1,235,000	617,500	617,500
Task No 3.3	Permits and Licenses	160,000	80,000	80,000
Task No 3.4	Project Management	95,000	47,500	47,500
Total Estimated Phase III Costs:		1,900,000	950,000	950,000
<b><u>Phase IV - Bidding and Construction</u></b>				
Total Estimated Phase IV Costs:		TO BE DETERMINED		
<b><u>Phase V - Screen Evaluation</u></b>				
Total Estimated Phase V Costs:		TO BE DETERMINED		
Total Estimated Project Costs Phases I, II, and III:		2,350,000	1,200,000	1,150,000

**Natomas Mutual Water Company**  
**American Basin Fish Screen and Habitat Improvement Project**

TABLE NO 3

Final Design of Fish Screen Facilities and Environmental Permits and Licenses

Task No.	Activity Description	EB Subtotal Labor (Days)	Sub-Consultant Cost (\$)	Direct Costs (\$)	Rounded Task Subtotal (\$)
I	Geotechnical Investigations, Surveying and Mapping	14.5	\$340,000	\$2,000	\$410,000
II	Final Design	1596	\$181,000	\$5,000	\$1,235,000
III	Permits and Licenses	10	\$122,000	\$3,000	\$160,000
IV	Project Management	90	\$25,000	\$2,000	\$95,000
<p>TOTAL EB LABOR (PERSON DAYS): <u>1710.5</u></p> <p>SUBTOTAL SUBCONTRACTOR COST: <u>\$668,000</u></p> <p>ESTIMATED DIRECT COSTS (MATERIALS, COPYING, TRAVEL, TELEPHONE, etc.): <u>\$12,000</u></p> <p>TOTAL PROJECT COSTS: <u>1,900,000</u></p> <p><u>Subcontractor Breakdown</u></p> <p>Task No. I - Geotechnical and Surveying</p> <p style="padding-left: 40px;">Kleinfelder, Inc. - \$148,500</p> <p style="padding-left: 40px;">KASL Engineers - \$191,500</p> <p style="padding-left: 40px;">Total - \$340,000</p> <p>Task No II - Final Design</p> <p style="padding-left: 40px;">Structural Integrity - \$22,000</p> <p style="padding-left: 40px;">Fishpro - \$53,000</p> <p style="padding-left: 40px;">Wave Engineers - \$84,000</p> <p style="padding-left: 40px;">Hanson Environmental - \$22,000</p> <p style="padding-left: 40px;">Total - \$181,000</p> <p>Task No III - Permits and Licenses</p> <p style="padding-left: 40px;">Miriam Greene Associates - \$97,000</p> <p style="padding-left: 40px;">MBK Engineers - \$25,000</p> <p style="padding-left: 40px;">Total - \$122,000</p> <p>Task No IV - Project Management</p> <p style="padding-left: 40px;">Wave Engineers - \$1,000</p> <p style="padding-left: 40px;">Miriam Greene Associates - \$24,000</p> <p style="padding-left: 40px;">Total - \$25,000</p>					

## Attachments

USGS Quad Map – Sacramento, California (1:100,000 Scale)

Right-of-Access Agreement

**Agreement of Access  
Between Natomas Mutual Water Company  
and Reclamation District No. 1000  
related to the  
American Basin Fish Screens and Habitat Improvement Project  
May 2000**

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**1. BACKGROUND**

1.1 Natomas Mutual Water Company (NMWC) and Ensign & Buckley Consulting Engineers (EB) are in the process of applying to CALFED for funds required for final design.

1.2 The CALFED application requires that where access over private or public lands is involved, the following type of agreement is necessary:

“Proposals that involve physical actions on private or public lands must provide satisfactory evidence that the landowner is a willing participant in the action. Projects proposed on private property or which require access to private property owned by someone other than the applicant must include written permission from the property owner. Failure to include written permission from the property owner may result in disqualification of the proposal.”

1.3 Physical Actions or work that is proposed to be performed within RD1000 property are limited to:

- ▶ Inspections and Photography to document existing conditions and to evaluate possible impacts on RD1000 facilities due to construction of any proposed new facilities.
- ▶ Surveys.
- ▶ Geotechnical investigations possibly including some drilling.

1.4 This phase of the work does not involve any construction.

**2. DESCRIPTION OF THE AGREEMENT FOR USE OF RD1000 PROPERTY**

2.1 Subject to the provisions of the attached “Agreement for Use of the Facilities”, RD1000 agrees that NMWC and its agents, under the care and control of EB, may have access to RD1000 property under the following conditions:


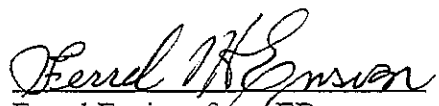
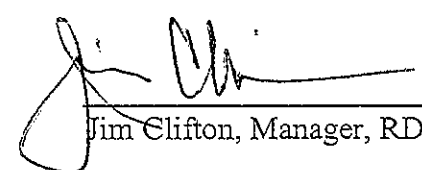
- ▶ Physical actions that are approved are limited to those described in Paragraph 1.3 above,

- ▶ No construction is approved by this agreement. Any construction within the boundaries of RD1000 property will be addressed in a separate agreement.

2.2 Subject to the provisions of the attached "Agreement for Use of the Facilities," NMWC and EB agree that:

- ▶ Access provided herein will be controlled so that no damage to RD1000 property or facilities will occur.
- ▶ If drilling for geophysical studies is required, EB will inform RD1000 of the location(s) and review the site, and available drawings, to determine the location of known underground facilities. RD1000 will be held harmless for any damage to existing facilities as a result of said drilling.
- ▶ This agreement will expire upon the completion of the final design, but not later than December 31, 2003.

This agreement is executed on the dates and by the following individuals on behalf of their respective organizations.

 Peter Hughes, Manager, NMWC	<u>5/15/2000</u> Date	 Ferrel Ensign, from EB	<u>MAY 15, 2000</u> Date
 Jim Clifton, Manager, RD1000		<u>5/15/00</u> Date	

AGREEMENT FOR USE OF FACILITIES

This Agreement is entered into this 11<sup>TH</sup> day of JUNE, 1982, by and between RECLAMATION DISTRICT NO. 1000, hereinafter called "DISTRICT", and NATOMAS CENTRAL MUTUAL WATER COMPANY, a corporation, hereinafter called "WATER COMPANY", for the consideration hereinafter expressed.

WHEREAS, DISTRICT and WATER COMPANY entered into an Agreement for use of facilities dated January 12, 1968; and

WHEREAS, DISTRICT and WATER COMPANY desire to modify the terms of such prior Agreement to memorialize WATER COMPANY's payment of the sum of \$70,000.00 to DISTRICT as hereinafter set forth and to provide for a more equitable sharing of maintenance responsibilities in connection with the Pritchard Lake Pumping Plant, and intend this Agreement to supersede in all respects such prior Agreement;

IT IS AGREED AS FOLLOWS:

1. DISTRICT acknowledges receipt of the sum of \$70,000.00 from WATER COMPANY as an advance toward one-half of the cost of installing a new pump and motor at DISTRICT's Pumping Plant Number Two, also known as the Pritchard Lake Pumping Plant, which advance payment is agreed to be a payment for deferred pumping costs to cover expected wear and depreciation of such new pump and motor over its expected useful life of 20 years. Since the time of such advance, it has been determined that one-half of the actual cost was \$67,732.11. DISTRICT agrees, upon execution of this Agreement, to reimburse to WATER COMPANY the difference between the \$70,000.00 advance and the actual one-half cost amount of \$67,732.11. It is understood and agreed that such sum

was paid for the purpose herein expressed and is not to be construed as rental or payment for the right to use DISTRICT facilities.

2. DISTRICT hereby consents and agrees that WATER COMPANY shall have, for the consideration hereinafter expressed, the right, during the irrigation season of each year, beginning on the 1st day of April and ending on the 1st day of October of each year (the beginning date of such period, on a season-by-season basis upon written notice by WATER COMPANY to DISTRICT, may be moved earlier to as early as February 1 of each such season if, within a period of 10 days from the date of mailing of such notice, the Manager or Superintendent of DISTRICT fails to notify WATER COMPANY in writing that the drain system is required by DISTRICT for drainage or flood protection purposes. In the event that the Manager or Superintendent of DISTRICT notifies WATER COMPANY that the drainage system is required for drainage or flood protection purposes such that the season of use by WATER COMPANY cannot be extended earlier, the matter shall be placed on the next regular meeting agenda of the Board of Trustees of DISTRICT for decision at the sole discretion of such Board of Trustees.) over the next 20 years from the date hereof, to use the Pritchard Lake Pumping Plant and the drainage ditches and canals of DISTRICT for the purpose of pumping into the DISTRICT such water as is purchased by WATER COMPANY or claimed by it under various riparian, appropriative, prescriptive, and other rights, and for transporting said water through DISTRICT's ditches and canals to convenient points of diversion therefrom for use in the irrigation of land within the service area of WATER COMPANY. WATER COMPANY shall also have the right during such period to transport in DISTRICT's ditches and canals drainage water discharged by



Stockholders of WATER COMPANY, and to pump such drainage water from said ditches and canals into its own irrigation facilities. WATER COMPANY shall, in each instance, notify Superintendent of DISTRICT before commencing to use Pritchard Lake Pumping Plant for its purposes.

3. DISTRICT further accords unto WATER COMPANY, during the term hereof, at convenient points along its ditches or canals, the right to install, at the sole cost of WATER COMPANY, pumping plants for pumping said water flowing in said ditches or canals, into the irrigation distribution system of WATER COMPANY for irrigation service throughout the service area of WATER COMPANY.

4. WATER COMPANY shall pay for all power utilized during its use of the Pritchard Lake Pumping Plant and shall conduct all routine maintenance and minor repairs not exceeding a cost of \$500.00 at WATER COMPANY's sole cost and expense during the herein defined irrigation season. Any and all major repairs of a cost exceeding \$500.00, required at any point in time during the term of this Agreement, shall be paid for by DISTRICT and WATER COMPANY in the proportions of the number of hours of actual pump use made by DISTRICT on the one hand and WATER COMPANY on the other during the next preceding calendar year. WATER COMPANY and DISTRICT shall each keep a record of the number of hours of use of pump at the Pritchard Lake Pumping Plant for such purpose.

All installation, maintenance, operation, and repair of said pumping plant, ditches, canals, and appurtenant works shall be by, or under the supervision and direction of Superintendent of, DISTRICT, and, also, in conformity with such rules, regulations, and directives as the Board of Trustees of DISTRICT may, from time-to-time

adopt in order to protect the works of reclamation of DISTRICT and the property of landowners within the boundaries of DISTRICT. WATER COMPANY undertakes and agrees to save DISTRICT and the Trustees thereof harmless of and from all damages that may result from the operation of said pumping plant, ditches, canals, and appurtenant works during the irrigation season by WATER COMPANY, as well as from any and all seepage damage to adjacent lands resulting from operations by WATER COMPANY.

5. WATER COMPANY shall so use the facilities of DISTRICT as not to interfere with the necessary maintenance and other work which DISTRICT shall from time-to-time perform on those facilities.

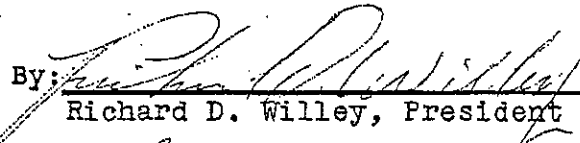
6. It is understood and agreed that the primary use of the pumping plant, ditches, and canals is for the reclamation of the lands within DISTRICT from flood and drainage damage and if, at any time during the irrigation season, the Board of Trustees of DISTRICT shall find it necessary to take over the pumping plant, ditches, canals, and appurtenant works of DISTRICT for the protection thereof, or the protection of the lands within the DISTRICT, said Trustees reserve the right so to do.


7. For the right to use of DISTRICT facilities hereinabove expressed, WATER COMPANY shall pay to DISTRICT at its office on or before the 1st day of June in each year of the term hereof, the sum of \$100.00. WATER COMPANY shall further pay to DISTRICT the sum of \$15.00 per day for each day that WATER COMPANY uses the Pritchard Lake Pump, which payment shall be made on October 15 of each year during the term hereof for the prior irrigation season's use of such pump.

8. WATER COMPANY and DISTRICT, and certain landowners, have entered into "Agreement for Installation of Weirs" dated September 16, 1953. The provisions of that Agreement are hereby confirmed, and nothing herein shall change or alter the rights or obligations of the parties as therein set forth. However, this Agreement does supersede previous agreements between the parties, whether oral or written, which have provided for WATER COMPANY's use of DISTRICT's pumping plant and ditches.

IN WITNESS WHEREOF, the respective parties hereto have hereunto and to a duplicate hereof, caused their respective corporate names to be signed and seals affixed, by their respective officers thereunto duly authorized the day and year first hereinabove written.

RECLAMATION DISTRICT NO. 1000

By:   
Richard D. Willey, President

By:   
Louise Inderkum, Secretary

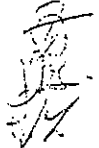
NATOMAS CENTRAL MUTUAL WATER COMPANY

By:   
Elmer J. Bolen, President

By:   
Edwin A. Willey, Secretary

THIS AGREEMENT, made and entered into this 12 day of January, 1968, by and between RECLAMATION DISTRICT NO. 1000, hereinafter called DISTRICT, and NATOMAS CENTRAL MUTUAL WATER COMPANY, a corporation, hereinafter called WATER COMPANY,

W I T N E S S E T H:

1. DISTRICT hereby consents and agrees that WATER COMPANY shall have, for the consideration hereinafter expressed, the right, during the irrigation season of each year, beginning *and ending on the 1st day of October* on the 1st day of April, 1968, to use the Pritchard Lake Pumping Plant and the drainage ditches and canals of DISTRICT for the purpose of pumping into the DISTRICT such water as is purchased by WATER COMPANY or claimed by it under various riparian, appropriate, prescriptive and other rights, and for transporting said water through DISTRICT'S ditches and canals to convenient points of diversion therefrom for use in the irrigation of lands within the service area of WATER COMPANY. WATER COMPANY shall also have the right to transport in DISTRICT'S ditches and canals drainage water discharged by stockholders of WATER COMPANY, and to pump such drainage water from said ditches and canals into its own irrigation facilities. WATER COMPANY shall, in each instance, notify Superintendent of DISTRICT before commencing to use Pritchard Lake Pumping Plant for its purposes. 

2. DISTRICT further accords unto WATER COMPANY, during the term hereof, at convenient points along its ditches or canals, the right to install, at the sole cost of WATER COMPANY, pumping plants for pumping said water flowing in said ditches or canals, into the irrigation distribution system of WATER COMPANY for irrigation service throughout the service area of WATER COMPANY.

3. WATER COMPANY shall pay for all electric energy

utilized during its use of the Pritchard Lake Pumping Plant and for the cost of any repairs made necessary by its operation of the plant. It shall also pay DISTRICT the sum of \$15.00 per day for each day that WATER COMPANY uses the Pritchard Lake pump. All installation, maintenance, operation and repair of said pumping plant, ditches, canals and appurtenant works shall be by, or under the supervision and direction of Superintendent of DISTRICT, and, also, in conformity with such rules, regulations and directives as the Board of Trustees of DISTRICT may, from time to time, adopt in order to protect the works of reclamation of DISTRICT and the property of landowners within the boundaries of DISTRICT. WATER COMPANY undertakes and agrees to save DISTRICT and the Trustees thereof harmless of and from all damages that may result from the operation of said pumping plant, ditches, canals and appurtenant works during the irrigation season by WATER COMPANY, as well as from any and all seepage damage to adjacent lands resulting from operations by WATER COMPANY.

4. WATER COMPANY shall so use the facilities of DISTRICT as not to interfere with the necessary maintenance and other work which DISTRICT shall from time to time perform on those facilities.

5. It is understood and agreed that the primary use of the pumping plant, ditches and canals is for the reclamation of the lands within DISTRICT from flood and drainage damage and if, at any time during the irrigation season, the Board of Trustees of DISTRICT shall find it necessary to take over the pumping plant, ditches, canals and appurtenant works of DISTRICT for the protection thereof, or the protection of the lands within the DISTRICT, said Trustees reserve the right so to do.

6. In addition to the costs assumed by WATER COMPANY in paragraph 3 hereof, WATER COMPANY shall pay unto DISTRICT at

its office on or before the 1st day of June in each year of the term hereof the sum of \$100.00, in lawful money of the United States, as an annual payment for the rights and privileges hereby accorded by DISTRICT to WATER COMPANY.

7. This Agreement shall continue in force for one year, and thereafter shall be deemed renewed from year to year, unless and until either party hereto shall serve notice in writing on or before the 1st day of February in any year of its election to terminate this Agreement. Any such notice of election to terminate, served on or before the 1st day of February in any year shall take effect on the 1st day of April next ensuing.

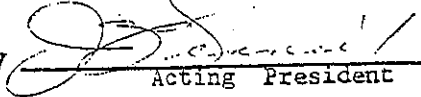
8. WATER COMPANY and DISTRICT, and certain landowners, have entered into "Agreement for Installation of Weirs" dated September 16, 1953. The provisions of that Agreement are hereby confirmed, and nothing herein shall change or alter the rights or obligations of the parties as therein set forth. However, this Agreement does supersede previous agreements between the parties, whether oral or written, which have provided for WATER COMPANY'S use of DISTRICT'S pumping plant and ditches.

IN WITNESS WHEREOF, the respective parties hereto have hereunto and to a duplicate hereof, caused their respective corporate names to be signed and seals affixed, by their respective officers thereunto duly authorized the day and year first hereinabove written.


(SEAL)

RECLAMATION DISTRICT NO. 1000

By

  
Acting President

And by

  
Secretary

NATOMAS CENTRAL MUTUAL WATER COMPANY

(CORPORATE  
SEAL)

By

*Lewis H. Hays*  
President

And by

*John A. Gaudin*  
Secretary